Sustainable Design TAA Process

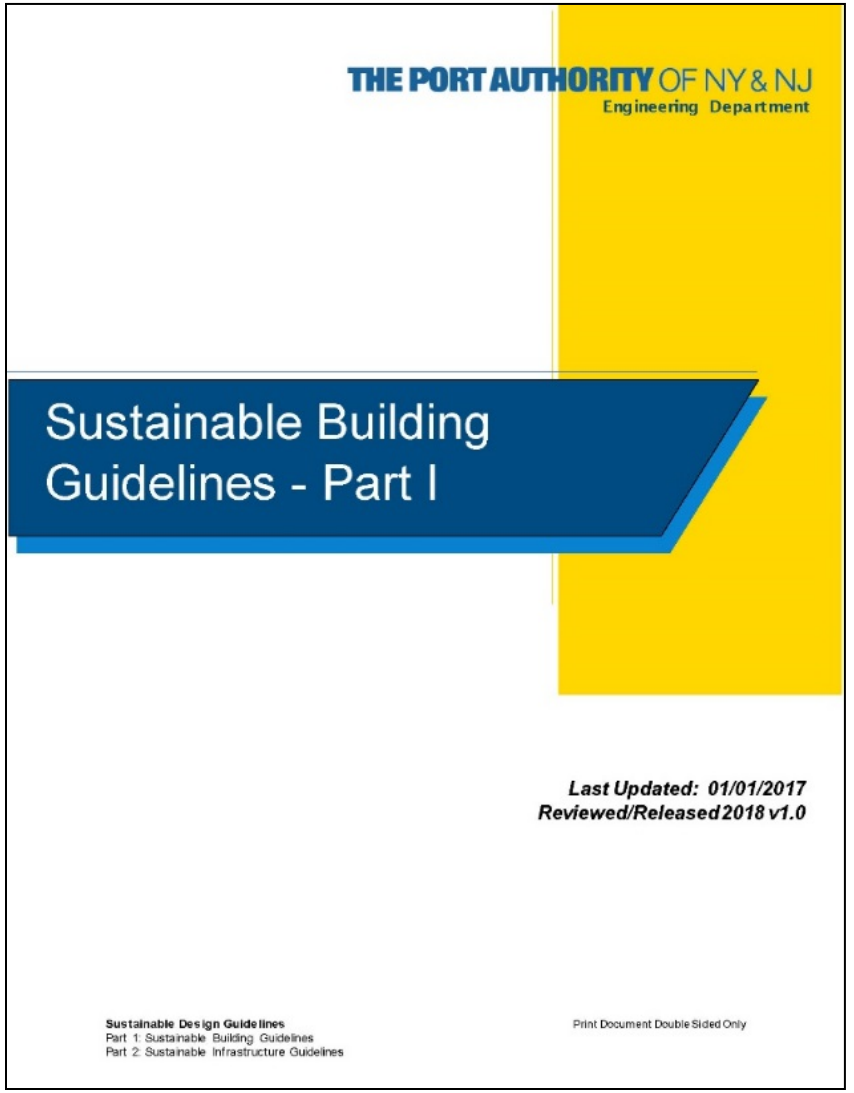
PORT AUTHORITY NY NJ
AIR LAND RAIL SEA

Agenda

- Sustainable Design at PANYNJ – Timeline and overview
- Project Types and Required Achievement Levels
  - Project Type Definitions
- Sustainable Design Workflow
  - Accessing documentation forms - Sustainable Project Initiation Form (SPIF)
- Sustainable Design TAA Submission
  - Walk-through of exemplary Project. Completed Project Credit Checklist, LEED templates and supporting backup documentation.
  - Common challenges
  - Typical template completion
- Question and Answer

Sustainable Design at PANYNJ- Timeline & Overview

- 1993: PANYNJ adopts Environmental Sustainability policy; amended in 2008
- 2006: Administrative Instruction “Sustainable Design” (AI-45-2) issued
- 2007: Sustainable Building Guidelines developed (now called “Legacy” version)
- 2011: Sustainable Infrastructure Guidelines developed
- 2017: Update to Sustainable Building Guidelines



Project Type Definitions

New Construction	New construction refers to site preparation for, and construction of, entirely new structures and / or extensions to existing structures whether or not the site was previously occupied.
Reconstruction	A renovation of an existing building or buildings involving replacement or rehabilitation of four or more primary building systems (as defined in this document) as part of a unified design project or multiple, coordinated design projects, even if implementation is phased.
Interior Construction	Fit-out or remodel of an interior space inside the building envelope. Examples include restaurant renovation, office space remodel, airport terminal retail renovation, etc.
Small Projects & Primary Systems	Replacement or rehabilitation of fewer than four of the following building systems, regardless of phasing, duration or project cost: roofs, ceilings, window replacement, building envelope, plumbing, site work, HVAC, electrical / electronics and elevator / escalator. Small projects also include demolition.

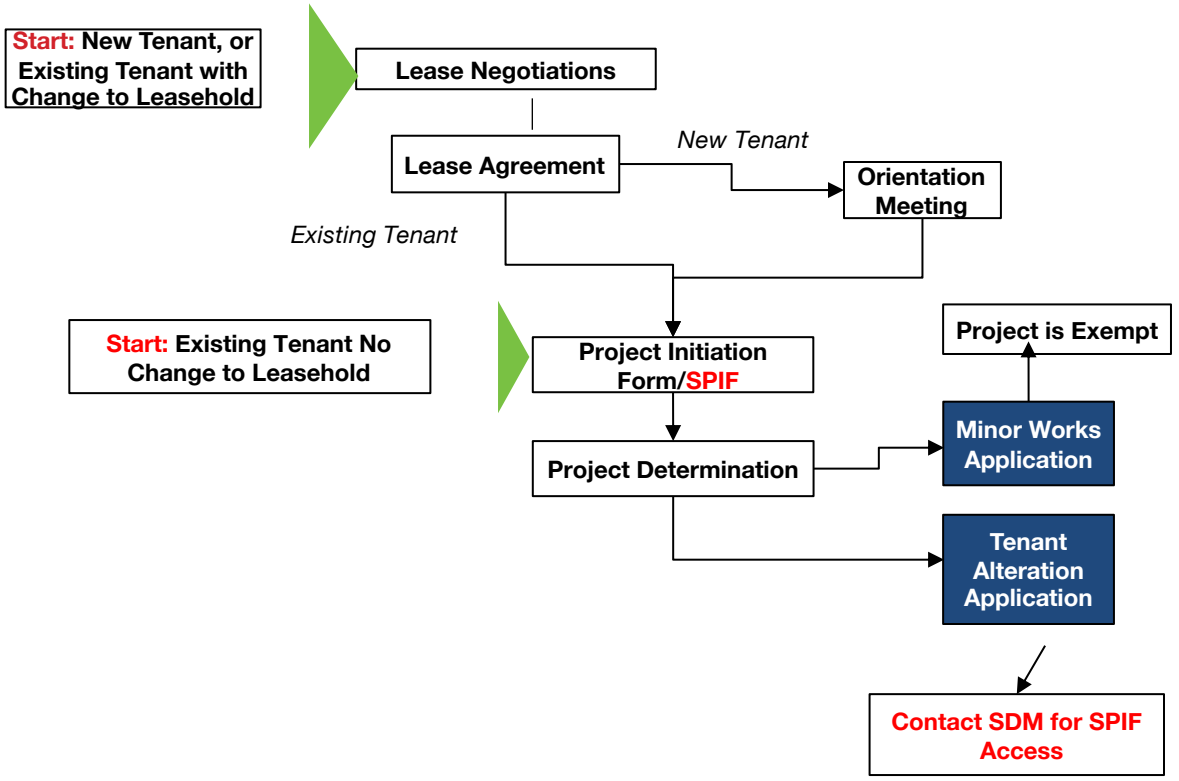
Project Types and Required Achievement Levels

TABLE 4.1 SBG PROJECT CATEGORIZATION FOR TAA PROJECTS			
Project Type	**LEED Rating System**	**LEED Level Required by Gross Square Footage (GSF)**	
		1,000 to 20,000	20,000 +
New Construction	**LEED BD+C**	**LEED Certified**	**LEED Silver**
Reconstruction	**LEED BD+C**	**LEED Certified[1]**	**LEED Certified**
Interior Construction	**LEED ID+C**	**LEED Certified[1]**	**LEED Certified**
Small Projects & Primary Systems		**100% of Applicable Credits from *Small Project & Primary Systems Green Design Table*[2]**	

1. Meet SBG requirements or contact SDM for an applicability determination based on project type, scale / scope

2. Projects using the Small Project and Primary Systems pathway must comply with all applicable credits

Sustainable Design Workflow – Design Submission



THE PORT AUTHORITY OF NY & NJ

PANYNJ Sustainable Project Initiation Form (SPIF) Revised: 4/4/2019

TENANT: Complete sections A & B and submit via email ➔	SUBMIT
QUESTIONS? Access the PA Sustainable Building Guidelines (SBG) ➔	ACCESS SBG

A. General Project Information

Facility	*LGA New Terminal B Head House*
TAA #	*GR-*
Project Title	
Project Gross Square Footage	*3491*
Engineer / Architect of Record	*(EOR) /* *(AOR)*
Tenant Coordinator / Liaison	*MelissaTargett*
Construction Cost	$
Estimated Project Schedule	*Construction: August (2019)- December (2019)*

B. Project Description

Applicable Project Type (Check One)	Suggested Rating System	
New Construction ☐	**LEED Building Design & Construction**	**Check One**
Reconstruction ☐	New Construction	☐
	Core and Shell	☐
	Retail	☐
	Warehouses and Distribution Centers	☐
	Hospitality	☐
Interior Construction ☑	**LEED Interior Design & Construction**	**Check One**
	Commercial Interiors	☐
	Retail	☑
	Hospitality	☐
Small Projects & Primary Systems ☐	**Small Projects & Primary Systems Table**	**Select up to 3 Types**
	Roofing	☐
	Windows	☐
	Building Envelope	☐
	Plumbing	☐
	Sitework, General Eng, Demolition	☐
	Refrigeration, Boiler, Rooftop Unit, Controls	☐
	Electric	☐
	Elevators / Escalators	☐

One submittal package will be submitted. Mulberry Street is a full restaurant design including mechanical, electrical, plumbing, and fire protection. The restaurant does include a full kitchen with an exhaust hood system.

Sustainable Design Manager Determination (FOR PA USE ONLY)

Project Categorization:	Interior Construction
Rating System:	LEED Interior Design & Construction, Retail
(Comment)	
Signature *Melissa Targett*	Date 6/12/19

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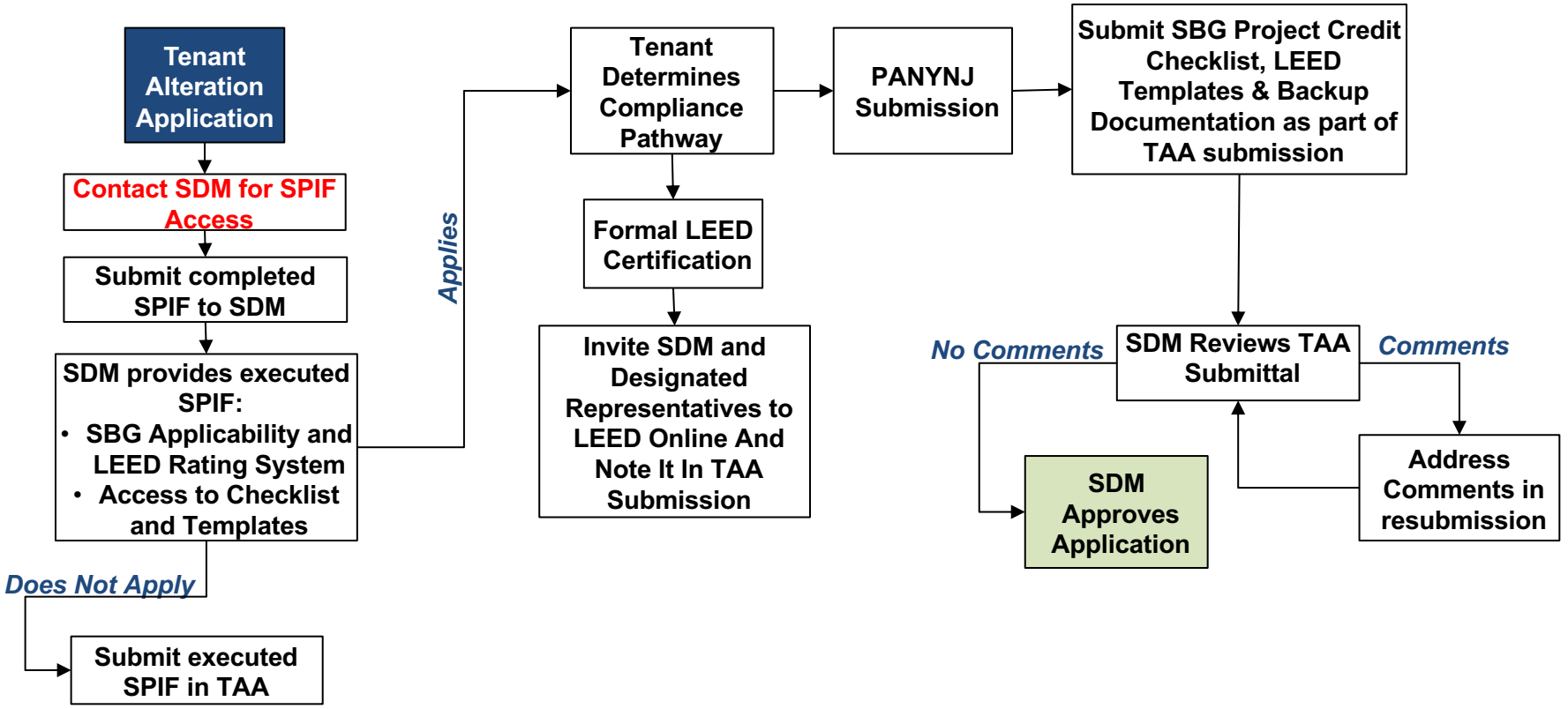
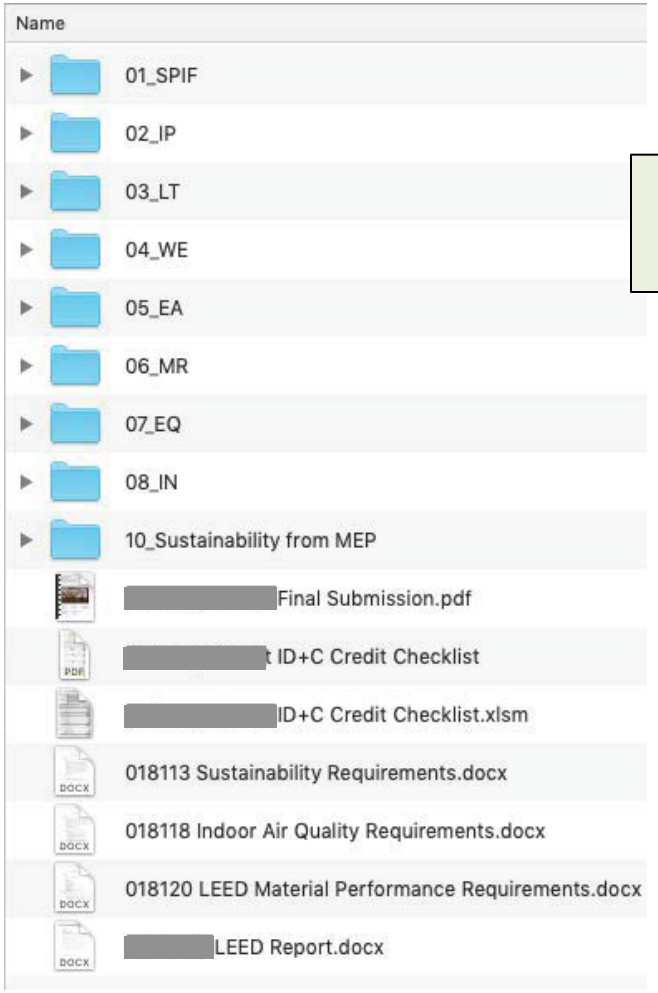
Sustainable Design Workflow – Design Submission



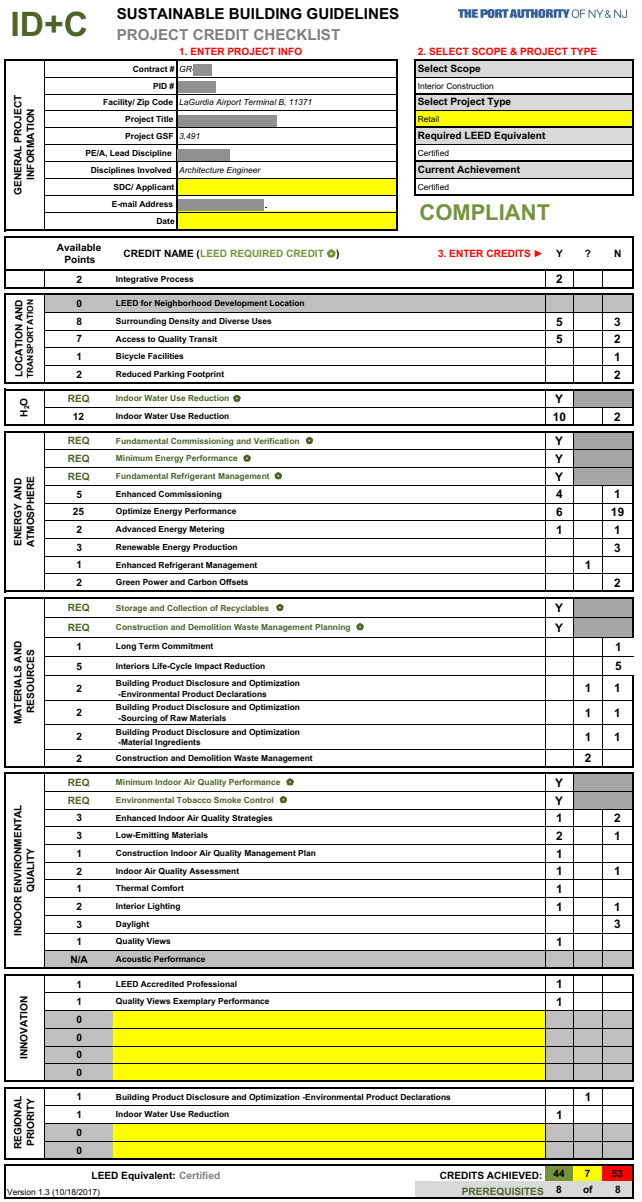
EXAMPLARY SUSTAINABLE DESIGN SUBMISSION

PROPER FILE STRUCTURE

1. Include completed Credit Checklist and SPIF in main folder.
2. Create individual folders for every credit attempted.
3. Within each folder include the completed credit template and back up documentation.



Exemplary ID+C Project Checklist



ID+C SUSTAINABLE BUILDING GUIDELINES
PROJECT CREDIT CHECKLIST
THE PORT AUTHORITY OF NY & NJ

1. ENTER PROJECT INFO

GENERAL PROJECT INFORMATION	
Contract #	GR[redacted]
PID #	[redacted]
Facility/ Zip Code	LaGurdia Airport Terminal B, 11371
Project Title	[redacted]
Project GSF	3,491
PE/A, Lead Discipline	[redacted]
Disciplines Involved	Architecture Engineer
SDC/ Applicant	
E-mail Address	[redacted].
Date	

2. SELECT SCOPE & PROJECT TYPE

Select Scope	
Interior Construction	
Select Project Type	
Retail	
Required LEED Equivalent	
Certified	
Current Achievement	
Certified	

COMPLIANT

	Available Points	CREDIT NAME (LEED REQUIRED CREDIT ✪)	3. ENTER CREDITS ► Y	?	N
	2	Integrative Process	2		
LOCATION AND TRANSPORTATION	0	LEED for Neighborhood Development Location			
	8	Surrounding Density and Diverse Uses	5		3
	7	Access to Quality Transit	5		2
	1	Bicycle Facilities			1
	2	Reduced Parking Footprint			2
H_2O	REQ	Indoor Water Use Reduction ✪	Y		
	12	Indoor Water Use Reduction	10		2
ENERGY AND ATMOSPHERE	REQ	Fundamental Commissioning and Verification ✪	Y		
	REQ	Minimum Energy Performance ✪	Y		
	REQ	Fundamental Refrigerant Management ✪	Y		
	5	Enhanced Commissioning	4		1
	25	Optimize Energy Performance	6		19
	2	Advanced Energy Metering	1		1
	3	Renewable Energy Production			3
	1	Enhanced Refrigerant Management		1	
	2	Green Power and Carbon Offsets			2
MATERIALS AND RESOURCES	REQ	Storage and Collection of Recyclables ✪	Y		
	REQ	Construction and Demolition Waste Management Planning ✪	Y		
	1	Long Term Commitment			1
	5	Interiors Life-Cycle Impact Reduction			5
	2	Building Product Disclosure and Optimization -Environmental Product Declarations		1	1
	2	Building Product Disclosure and Optimization -Sourcing of Raw Materials		1	1
	2	Building Product Disclosure and Optimization -Material Ingredients		1	1
	2	Construction and Demolition Waste Management		2	
INDOOR ENVIRONMENTAL QUALITY	REQ	Minimum Indoor Air Quality Performance ✪	Y		
	REQ	Environmental Tobacco Smoke Control ✪	Y		
	3	Enhanced Indoor Air Quality Strategies	1		2
	3	Low-Emitting Materials	2		1
	1	Construction Indoor Air Quality Management Plan	1		
	2	Indoor Air Quality Assessment	1		1
	1	Thermal Comfort	1		
	2	Interior Lighting	1		1
	3	Daylight			3
	1	Quality Views	1		
	N/A	Acoustic Performance			
INNOVATION	1	LEED Accredited Professional	1		
	1	Quality Views Exemplary Performance	1		
	0				
	0				
	0				
	0				
REGIONAL PRIORITY	1	Building Product Disclosure and Optimization -Environmental Product Declarations		1	
	1	Indoor Water Use Reduction	1		
	0				
	0				

LEED Equivalent: Certified — CREDITS ACHIEVED: 44 | 7 | 53
Version 1.3 (10/18/2017) — PREREQUISITES 8 of 8

PORT AUTHORITY NY NJ
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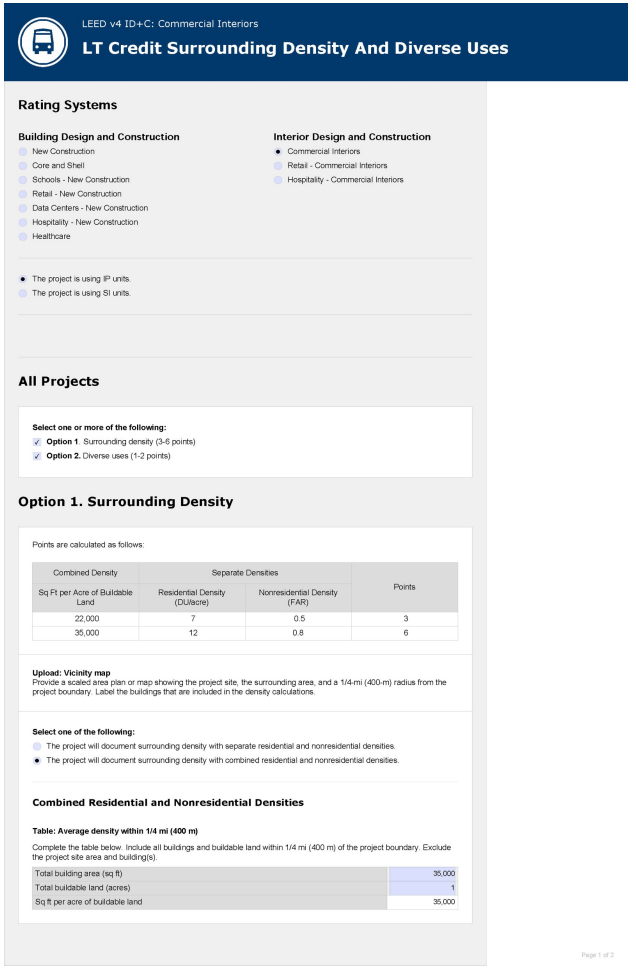
Typical Credit Template & Backup Documentation- Location and Transportation

LTc Surrounding Density and Diverse Uses

1. Submit completed credit template that identifies the rating system, credit point options being attempted and provides completed tables for the various credit options.
2. Provide back up documentation that has been either generated by the tenant or has been pre-generated for the facility by the Port Authority (contact SDM for availability).



LEED v4 ID+C: Commercial Interiors

LT Credit Surrounding Density And Diverse Uses

Rating Systems

Building Design and Construction
- New Construction
- Core and Shell
- Schools - New Construction
- Retail - New Construction
- Data Centers - New Construction
- Hospitality - New Construction
- Healthcare

Interior Design and Construction
- Commercial Interiors
- Retail - Commercial Interiors
- Hospitality - Commercial Interiors

- The project is using IP units.
- The project is using SI units.

All Projects

Select one or more of the following:
- **Option 1**. Surrounding density (3-6 points)
- **Option 2.** Diverse uses (1-2 points)

Option 1. Surrounding Density

Points are calculated as follows:

Combined Density	Separate Densities		Points
Sq Ft per Acre of Buildable Land	Residential Density (DU/acre)	Nonresidential Density (FAR)	
22,000	7	0.5	3
35,000	12	0.8	6

Upload: Vicinity map
Provide a scaled area plan or map showing the project site, the surrounding area, and a 1/4-mi (400-m) radius from the project boundary. Label the buildings that are included in the density calculations.

Select one of the following:
- The project will document surrounding density with separate residential and nonresidential densities.
- The project will document surrounding density with combined residential and nonresidential densities.

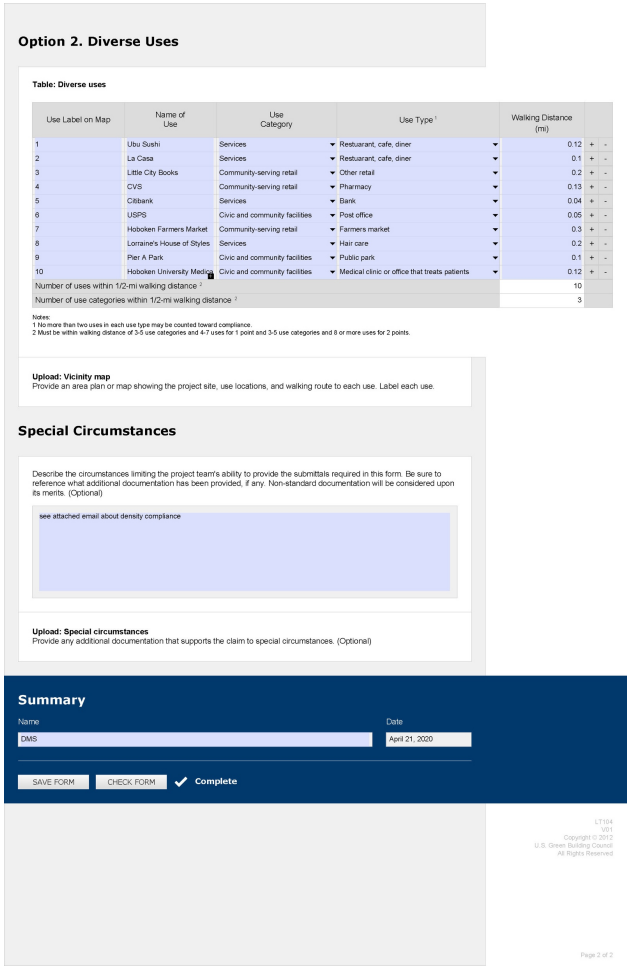
Combined Residential and Nonresidential Densities

Table: Average density within 1/4 mi (400 m)

Complete the table below. Include all buildings and buildable land within 1/4 mi (400 m) of the project boundary. Exclude the project site area and building(s).

Total building area (sq ft)	35,000
Total buildable land (acres)	1
Sq ft per acre of buildable land	35,000

Page 1 of 2



Option 2. Diverse Uses

Table: Diverse uses

Use Label on Map	Name of Use	Use Category	Use Type [1]	Walking Distance (mi)	
1	Ubu Sushi	Services	Restuarant, cafe, diner	0.12	+ -
2	La Casa	Services	Restuarant, cafe, diner	0.1	+ -
3	Little City Books	Community-serving retail	Other retail	0.2	+ -
4	CVS	Community-serving retail	Pharmacy	0.13	+ -
5	Citibank	Services	Bank	0.04	+ -
6	USPS	Civic and community facilities	Post office	0.05	+ -
7	Hoboken Farmers Market	Community-serving retail	Farmers market	0.3	+ -
8	Lorraine's House of Styles	Services	Hair care	0.2	+ -
9	Pier A Park	Civic and community facilities	Public park	0.1	+ -
10	Hoboken University Medical	Civic and community facilities	Medical clinic or office that treats patients	0.12	+ -
Number of uses within 1/2-mi walking distance [2]				10	
Number of use categories within 1/2-mi walking distance [2]				3	

Notes:
1 No more than two uses in each use type may be counted toward compliance.
2 Must be within walking distance of 3-5 use categories and 4-7 uses for 1 point and 3-5 use categories and 8 or more uses for 2 points.

Upload: Vicinity map
Provide an area plan or map showing the project site, use locations, and walking route to each use. Label each use.

Special Circumstances

Describe the circumstances limiting the project team's ability to provide the submittals required in this form. Be sure to reference what additional documentation has been provided, if any. Non-standard documentation will be considered upon its merits. (Optional)

see attached email about density compliance

Upload: Special circumstances
Provide any additional documentation that supports the claim to special circumstances. (Optional)

Summary

Name: DMS

Date: April 21, 2020

SAVE FORM | CHECK FORM | Complete

LT104
V01

Page 2 of 2

PORT AUTHORITY NY NJ

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Typical Credit Template And Backup Documentation- Location and Transportation

NEW YORK, NY

LOCATION AND TRANSPORTATION
SURROUNDING DENSITY AND DIVERSE USES

07.10.2018

Located between [redacted] the project site is a short distance from Highbridge and Fort Tryon Park. Strategically located between Hudson and Washington Heights, the surrounding density far exceeds the threshold of 35,000 sf per acre of buildable land. Additionally, the civic/community and services neighborhood of Hudson and Washington Heights offers access to a plethora of diverse uses across all five categories.

SURROUNDING DENSITY - **6 Points Achieved**

The total area within a 1/4-mile radius circle is approximately 125.7 acres. Assuming that 80% of the land is "buildable land,' the total area of applicable land for this credit is approximately 100.6 acres. The threshold to achieve 6 points in this credit is a combined density (both residential and nonresidential) of 35,000 sf/acre of buildable land. This equates to a required area of 3,519,000 sf.

AREA OF 1/4-MILE CIRCLE				SF/ACRE		CREDIT THRESHOLD
$(\pi*(5{,}280ft/4)^2$	x	0.8	+	43,560 sf/acre	x	35,000 sf/acre

3,519,000 sf.

A	111 Wadsworth Ave:	503,310	F	801 181st St:	72,240	K	116 Pinehurst Ave:	540,000
B	1360 St Nicholas Ave:	517,910	G	455 Washington Ave:	101,100	L	371 Ft Washington Ave:	81,804
C	120 Cabrini Blvd:	890,134	H	306 Ft Washington Ave:	128,343	M	359 Ft Washington Ave:	81,804
D	829 W 181st St:	72,240	I	4140 Broadway:	113,373	N	1301 St Nicholas:	85,482
E	92 Pinehurst Ave:	84,037	J	330 Haven Ave:	210,468	O	24-42 Bennett Ave:	75,522

Total: 3,557,767 sf

DIVERSE USES - **2 Points Achieved**

The threshold to achieve 2 points in this credit is a 1/2-mile walking distance to eight or more existing and pubicly available diverse uses.

1. Citi Bank (Services, Bank) - 0.13 mile
2. Tampopo Ramen (Services, Restaurant) - 0.18 mile
3. Envy Hair Salon (Services, Hair Care) - 0.21 mile
4. Happy Laundry (Services, Laundry) - 0.20 mile
5. St. Jesus Pharmacy (Community-Serving Retail, Pharmacy) - 0.08 mile
6. Modell's Sporting Goods (Community-Serving Retail, Other Retail) - 0.22 mile
7. J. Hood Wright Park (Civic & Community Facilities, Public Park) - 0.20 mile
8. Holyrood Episcopal Church (Civic & Community Facilities, Place of Worship) - 0.04 mile
- Project Site

Typical Credit Template And Backup Documentation- Location and Transportation

[redacted]
NEW YORK, NY

LOCATION AND TRANSPORTATION
ACCESS TO QUALITY TRANSIT
07.10.2018

Located between [redacted] the project site is a short distance two subway stations and five bus stops: A: 175th Street - Ft Washington Ave; B: 1181st Street - St Nicholas Ave; C: Ft Wahsington Ave / W 177th St; D: Ft Washington / W 181st St; E: Broadway / W 181st St; F: W 179th St / St Nicholas Ave; and G: Broadway / W 174th St. These 2 subway stations and 5 bus stops provide access to 2 different lines and 5 bus routes. The strategic location of the George Washinton Bridge Bus Terminal provides its employees and visitors with a great number of transportation choices--far exceeding the threshold for 'Exemplary Performance.'

ACCESS TO QUALITY TRANSIT

7 Points + 1 Point for Exemplary Performance

Located within a 1/2-mile walking distance of two subway stations and a 1/4-mile of 5 bus stops

- A Train- 175th Street - Ft Washington Ave
- 1 Train - 181st Street - St Nicholas Ave
- M4 Bus - Ft Wahsington Ave / W 177th St
- M98 Bus - Ft Washington / W 181st St
- M100 Bus - Broadway / W 181st St
- M3 Bus - W 179th St / St Nicholas Ave
- BX7 Bus - Broadway / W 174th St
- Project Site

[redacted] provides its employees and visitors with a great number of transportation choices, greatly reducing motor vehicle use. The threshold to achieve 7 points in this credit is a minimum of 360 weekday trips and 216 weekend trips. In order to achieve 'Exemplary Performance,' these thresholds must be doubled (i.e., 720 weekday trips and 432 weekend trips).

At the seven previously listed stops (A-G), there is access to two subway lines and six bus lines:

- Eighth Avenue Line - A
- Seventh Avenue Line - 1
- M4 Line
- M98 Line
- BX7 Line
- M100 Line
- M3 Line

Based on the schedule provided by the MTA (Available at: http://www.mta.info/schedules), each subway line provides approximately 160 trips per day during the week and approximately 95 trips per day during the weekend. As noted above, there are 2 subway line routes that make stops at these two stations, providing access to different areas of Manhattan, the Bronx, Queens, and Brooklyn. In total, these subway lines provide approximately 320 trips (in one direction) per day during the week and approximately 190 trips (in one direction) per day during the weekend.

Each bus line provides varying trips per day during the week and weekend. In total, these bus lines provide approximately 490 trips (in one direction) per day during the week and approximately 350 trips (in one direction) per day during the weekend.

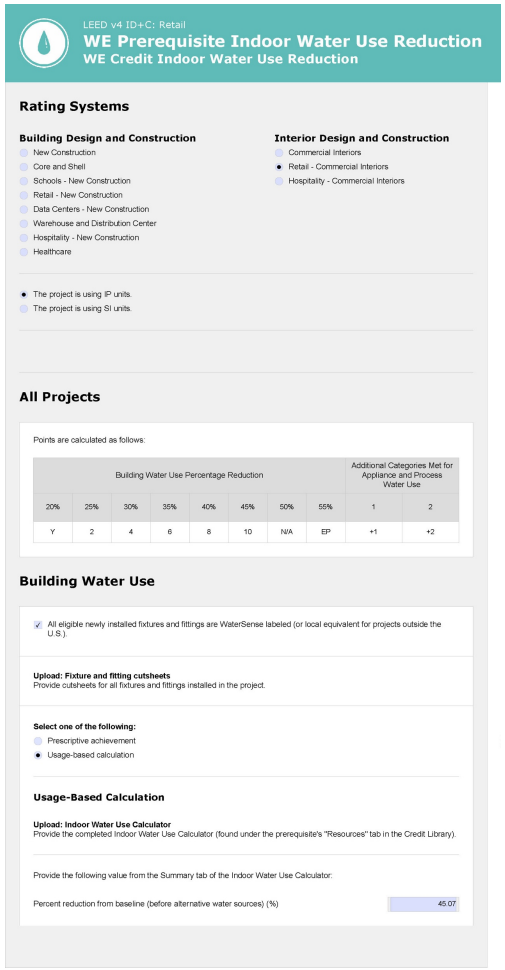
In total, the **subway and bus lines** provide approximately **810 trips** (in one direction) per day during the week and approximately **540 trips** (in one direction) per day during the weekend.

Typical Credit Template & Backup Documentation- Water Efficiency

<u>WEc Indoor Water Use Reduction</u>

1. Provide completed template that identifies rating system , compliance strategy, and water use calculation results.

2. Provide backup documentation consisting of:
   a) Completed water use calculator
   b) Cutsheets of plumbing fixtures that confirm calculation inputs.



LEED v4 ID+C: Retail

WE Prerequisite Indoor Water Use Reduction

WE Credit Indoor Water Use Reduction

Rating Systems

Building Design and Construction

- ○ New Construction
- ○ Core and Shell
- ○ Schools - New Construction
- ○ Retail - New Construction
- ○ Data Centers - New Construction
- ○ Warehouse and Distribution Center
- ○ Hospitality - New Construction
- ○ Healthcare

Interior Design and Construction

- ○ Commercial Interiors
- ● Retail - Commercial Interiors
- ○ Hospitality - Commercial Interiors

- ● The project is using IP units
- ○ The project is using SI units

All Projects

Points are calculated as follows:

Building Water Use Percentage Reduction								Additional Categories Met for Appliance and Process Water Use	
20%	25%	30%	35%	40%	45%	50%	55%	1	2
Y	2	4	6	8	10	N/A	EP	+1	+2

Building Water Use

☑ All eligible newly installed fixtures and fittings are WaterSense labeled (or local equivalent for projects outside the U.S.).

Upload: Fixture and fitting cutsheets
Provide cutsheets for all fixtures and fittings installed in the project.

Select one of the following:

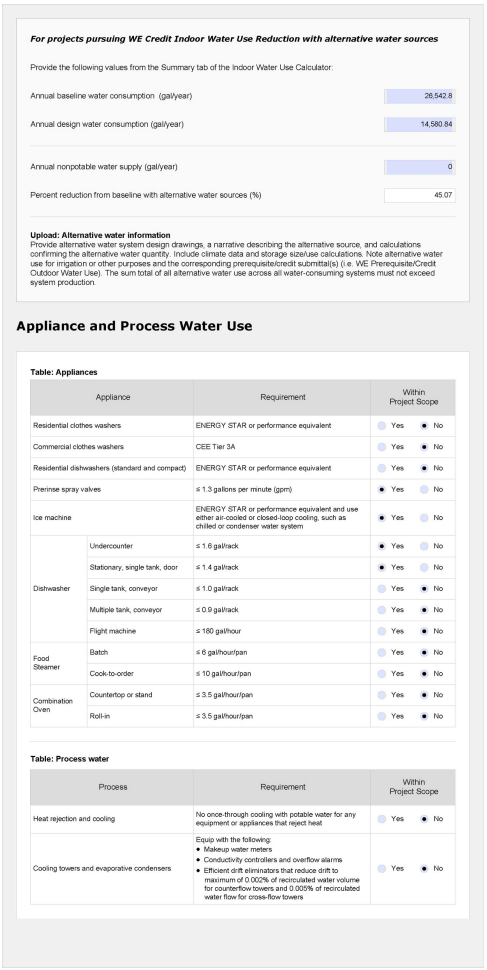
- ○ Prescriptive achievement
- ● Usage-based calculation

Usage-Based Calculation

Upload: Indoor Water Use Calculator
Provide the completed Indoor Water Use Calculator (found under the prerequisite's "Resources" tab in the Credit Library).

Provide the following value from the Summary tab of the Indoor Water Use Calculator:

Percent reduction from baseline (before alternative water sources) (%) 45.07



For projects pursuing WE Credit Indoor Water Use Reduction with alternative water sources

Provide the following values from the Summary tab of the Indoor Water Use Calculator:

Annual baseline water consumption (gal/year) 26,542.8

Annual design water consumption (gal/year) 14,580.84

Annual nonpotable water supply (gal/year) 0

Percent reduction from baseline with alternative water sources (%) 45.07

Upload: Alternative water information
Provide alternative water system design drawings, a narrative describing the alternative source, and calculations confirming the alternative water quantity. Include climate data and storage size/use calculations. Note alternative water use for irrigation or other purposes and the corresponding prerequisite/credit submittal(s) (i.e. WE Prerequisite/Credit Outdoor Water Use). The sum total of all alternative water use across all water-consuming systems must not exceed system production.

Appliance and Process Water Use

Table: Appliances

Appliance		Requirement	Within Project Scope
Residential clothes washers		ENERGY STAR or performance equivalent	○ Yes ● No
Commercial clothes washers		CEE Tier 3A	○ Yes ● No
Residential dishwashers (standard and compact)		ENERGY STAR or performance equivalent	○ Yes ● No
Prerinse spray valves		≤ 1.3 gallons per minute (gpm)	● Yes ○ No
Ice machine		ENERGY STAR or performance equivalent and use either air-cooled or closed-loop cooling, such as chilled or condenser water system	● Yes ○ No
Dishwasher	Undercounter	≤ 1.6 gal/rack	● Yes ○ No
	Stationary, single tank, door	≤ 1.4 gal/rack	● Yes ○ No
	Single tank, conveyor	≤ 1.0 gal/rack	○ Yes ● No
	Multiple tank, conveyor	≤ 0.9 gal/rack	○ Yes ● No
	Flight machine	≤ 180 gal/hour	○ Yes ● No
Food Steamer	Batch	≤ 6 gal/hour/pan	○ Yes ● No
	Cook-to-order	≤ 10 gal/hour/pan	○ Yes ● No
Combination Oven	Countertop or stand	≤ 3.5 gal/hour/pan	○ Yes ● No
	Roll-in	≤ 3.5 gal/hour/pan	○ Yes ● No

Table: Process water

Process	Requirement	Within Project Scope
Heat rejection and cooling	No once-through cooling with potable water for any equipment or appliances that reject heat	○ Yes ● No
Cooling towers and evaporative condensers	Equip with the following: • Makeup water meters • Conductivity controllers and overflow alarms • Efficient drift eliminators that reduce drift to maximum of 0.002% of recirculated water volume for counterflow towers and 0.005% of recirculated water flow for cross-flow towers	○ Yes ● No
Discharge water temperature tempering	Where local requirements limit discharge temperature of fluids into drainage system, use tempering device that runs water only when equipment discharges hot water OR Provide thermal recovery heat exchanger that cools drained discharge water below code-required maximum discharge temperatures while simultaneously preheating inlet makeup water OR If fluid is steam condensate, return it to boiler	○ Yes ● No
Venturi-type flow-through vacuum generators or aspirators	Use no device that generates vacuum by means of water flow through device into drain	○ Yes ● No

For projects pursuing WE Credit Indoor Water Use Reduction

Select all that apply. The project meets the requirements under the following appliance/process uses:

- ☐ Commercial washing machines
- ☑ Commercial kitchen equipment
- ☐ Laboratory and medical equipment
- ☐ Municipal steam systems

Upload: Appliance and process water cutsheets
Provide cutsheets documenting compliance with the appliance and process water requirements.

Special Circumstances

Describe the circumstances limiting the project team's ability to provide the submittals required in this form. Be sure to reference what additional documentation has been provided, if any. Non-standard documentation will be considered upon its merits. (Optional)

Indoor Water Use Calculator:
All handsinks will be restricted to 1 GPM post-installation by an attachable aerator.

Appliances:
Pre-rinse spray valves
Item #202.1 T&S Brass B-0113-BC Pre-rinse Faucet has a flow rate of .65 gpm.
Item #209.1 T&S Brass B-0113-ADF12 Pre-rinse Faucet has a flow rate of 1.15 gpm.
Ice Machine
Item #107 Ice-O-Matic CIM1448HW Ice Cuber is not Energy Star rated, but is air cooled. Request has been made to switch to an

Upload: Special circumstances
Provide any additional documentation that supports the claim to special circumstances. (Optional)

Summary

Name: Nina Mellin Date: April 21, 2020

SAVE FORM CHECK FORM ✕ **Incomplete.** Please complete the highlighted fields and/or address any omissions in the Special Circumstances section.

PORT AUTHORITY NY NJ

AIR LAND RAIL SEA

Typical Credit Template And Backup Documentation: Water Efficiency

Mulberry Street

Group name	[redacted]

Table: Project Information

Enter project occupancy information. This information should be consistent with occupancy numbers used in other LEED credits.

☐ **Non-default gender mix**
The default gender mix is half male and half female. If necessary, modify the Male and Female occupant type columns for non-default gender mix if the project is specifically designed for an alternative gender ratio or the project is expected to have alternative gender usage rates for the life of the building.

Occupancy Type	Employees (FTE)	Visitors	Retail Customers	Students (K-12)	Residential	Other *(specify)*	Gender Ratio (%)
Total	9		116				100%
Male	5	0	58	0	0	0	50%
Female	4	0	58	0	0	0	50%

Determine the percent of males expected to use urinals (enter 100% if all male restrooms have urinals, 0% if the project contains no urinals, etc)

Percent of males expected to use restrooms with urinals	100%

Enter the number of days the project is accessible to employees or FTE.

Annual days of operation	365

For projects with dual-flush toilets

Enter the resulting flush rate into the design case flush rate section below.

Low flush (gpf)	
Full flush (gpf)	
LEED weighted average flush rate (gpf)	0.00

Table: Flush Fixtures

1. Indicate the **Fixture ID** that matches the information provided in the plumbing schedule.
2. Select the **Fixture Family** and **Fixture Type** installed on the project.
3. Enter the **Design Flush Rate** identified by the manufacturer - for dual flush toilets, use the dual flush calculator to determine average flush rate.
4. Enter **Percent of Occupants** with access to the fixture. If the fixture is installed in all restrooms, use 100%.
5. If necessary, modify the **Total Uses per Day** column for non-default uses.

Fixture Information			Flush Rate		Percent of Occupants (%)	Uses per Day						Total Daily Uses		Total Daily Water Use	
Fixture ID	Fixture Family	Fixture Type	Baseline Flush Rate (gpf)	Design Flush Rate (gpf)		Employees (FTE)	Visitors	Retail Customers	Students (K-12)	Residential	Other	Default	Non-default (Optional)	Baseline (gallons)	Design (gallons)
Base Building	Urinal	Low-Flow Urinal	1.00	0.125	50	2.0	0.0	0.10	0.0	0.0		15.8		7.90	0.9875
Base Building	Toilet (male)	Dual-Flush Water Closet	1.60	1.1	50	1.0	0.0	0.10	0.0	0.0		10.8		8.64	5.94
Base Building	Toilet (female)	Dual-Flush Water Closet	1.60	1.1	50	3.0	0.0	0.20	0.0	0.0		23.6		18.88	12.98
						0.0	0.0	0.00	0.0	0.0		0.0		0.00	0
						0.0	0.0	0.00	0.0	0.0		0.0		0.00	0
Baseline case annual flush volume (gallons/year)					12,928.30										
Design case annual flush volume (gallons/year)					7,266.24										

Table: Flow Fixtures

1. Indicate the **Fixture ID** that matches the information provided in the plumbing schedule.
2. Select the **Fixture Type** installed on the project.
3. If necessary, modify the **Duration** column for non-default values.
4. Enter the **Design Flow Rate** identified by the manufacturer.
5. Enter **Percent of Occupants** with access to the fixture. If the fixture is installed in all restrooms, use 100%.
6. If necessary, modify the **Total Uses per Day** column for non-default uses.

Fixture Information		Duration		Flow Rate		Percent of Occupants (%)	Uses per Day						Total Daily Uses		Total Daily Water Use	
Fixture ID	Fixture Type	Default (sec)	Non-default (sec) (Optional)	Baseline Flow Rate (gpm)	Design Flow Rate (gpm)		Employees (FTE)	Visitors	Retail Customers	Students (K-12)	Residential	Other	Default	Non-default (Optional)	Baseline (gallons)	Design (gallons)
Base Building	Public lavatory (restroom) faucet	30		0.50	0.35	100	3.0	0.0	0.2	0.0	0.0		50.2		12.55	8.79
201	Kitchen faucet	15		2.20	1	100	1.0	0.0	0.0	0.0	0.0		9.0		4.95	2.25
301	Kitchen faucet	15		2.20	1	100	1.0	0.0	0.0	0.0	0.0		9.0		4.95	2.25
308	Kitchen faucet	15		2.20	1	100	1.0	0.0	0.0	0.0	0.0		9.0		4.95	2.25
409	Kitchen faucet	15		2.20	1	100	1.0	0.0	0.0	0.0	0.0		9.0		4.95	2.25
301	Kitchen faucet	15		2.20	1	100	1.0	0.0	0.0	0.0	0.0		9.0		4.95	2.25
Baseline case annual flow volume (gallons/year)						13,614.50										
Design case annual flow volume (gallons/year)						7,314.60										

Summary for Design and Construction Rating Systems

Note: All information on this tab is READ-ONLY. To edit, see the previous tab(s).

Group Name	Baseline Case (gallons/year)			Design Case (gallons/year)		
	Annual Flush Volume	Annual Flow Volume	Annual Consumption	Annual Flush Volume	Annual Flow Volume	Annual Consumption
[redacted]	12,928.30	13,614.50	26,542.80	7,266.24	7,314.60	14,580.84

Annual baseline water consumption (gallons/year)	26,542.80
Annual design water consumption (gallons/year)	14,580.84
Percent water use reduction (%)	**45.07%**

TOTO. **TL221SD**

Connelly™ Single-Handle Lavatory Faucet

FEATURES

- WaterSense certified low-flow 1.5 gpm (5.7 lpm) faucet
- Lever handle
- Brass construction
- Ceramic disk mixing cartridge
- Metal pop-up drain assembly included

COLORS/FINISHES

- #CP Polished Chrome
- #BN Brushed Nickel
- #PN Polished Nickel

CODES/STANDARDS

- Complies with federal and state statutes as lead-free
- Meets or exceeds ASME A112.18.1/CSA B125.1, NSF 61-9
- Certifications: IAPMO(cUPC), EPA WaterSense, State of Massachusetts and others
- Code Compliance: UPC, IPC, NSPC, NPC Canada, and others
- Legislative compliance: California AB1953, Vermont S.152 & Maryland HB. 372, California Green Building Code, City of Los Angeles Water Efficiency Ordinance
- Contains a weighted average of 0.25% lead or less
- ADA compliant

PRODUCT SPECIFICATION

The single-handle lavatory faucet shall have a maximum flow rate of 1.5 gpm (5.7 lpm). Product shall have lever handle. Product shall have a pivoting aerator. Product shall have a brass construction. Product shall have a ceramic disk mixing cartridge. Product shall include metal pop-up drain assembly. Product shall be **TOTO Model TL221SD#____.**

TOTO. **CWT426CMFG**

AP Wall-Hung Toilet, 1.28 GPF & 0.9 GPF

FEATURES

AP Bowl

- DYNAMAX TORNADO FLUSH® system, high efficiency (1.28 GPF/0.9 GPF)
- CEFIONTECT® ceramic glaze - prevents debris, mold from sticking to ceramic surfaces
- Universal Height
- Elongated front bowl

Dual® In Wall Tank

- Dual flushing system, high-efficiency (1.28 GPF/4.8 LPF & 0.9 GPF/3.4 LPF) Avg. flush 1.03 GPF
- Adjustable 15"-19" mounting height
- Saves up to 9" of floor space compared to standard floor-mounted toilet
- Supports up to 880lbs
- Commercial 2" x 6" or optional residential installation with 2" x 4" wall studs with waste outlet kit
- Copper supply line

Push Plate

- YP930
  Basic Round Push Plate
  #WH White Matte or #MS Matte Silver

DYNAMAX TORNADO FLUSH · Skirted Design · CEFIONTECT

KIT COMPONENTS

- CT426CFG#01
  AP Wall-Hung Toilet
- WT12M
  In-Wall Tank System (Copper Pipe)
- YP930
  Basic Round Push Plate
  #WH White Matte or #MS Matte Silver

Available Options

- YP920MWH - White Matte Basic Square Push Plate
- YP920MMS - Matte Silver Basic Square Push Plate
- YP970RSS - Stainless Steel Wall Square Push Plate
- YP980RSS - Stainless Steel Wall Round Push Plate
- SS114 - SoftClose Seat

CODES/STANDARDS

- Meets or exceeds:
  -Bowl: ASME A112.19.2/CSA B45.1, ASME A112.19.14
  -Carrier System: ASME A112.6.2
  -Tank Trim: IAPMO PS50, CSA B125.3, ASSE1002
- Certifications: IAPMO (cUPC), EPA WaterSense State of Massachusetts, City of Los Angeles and others
- Legislative compliance: California AB715, California Green Building Code, City of Los Angeles Water Efficiency Ordinance
- Code Compliance: UPC, IPC, NSPC, NPC Canada, and others
- Complies with CA Prop 65 warning requirements

COLORS/FINISHES

- Standard
  #01 Cotton

PORT AUTHORITY NY NJ

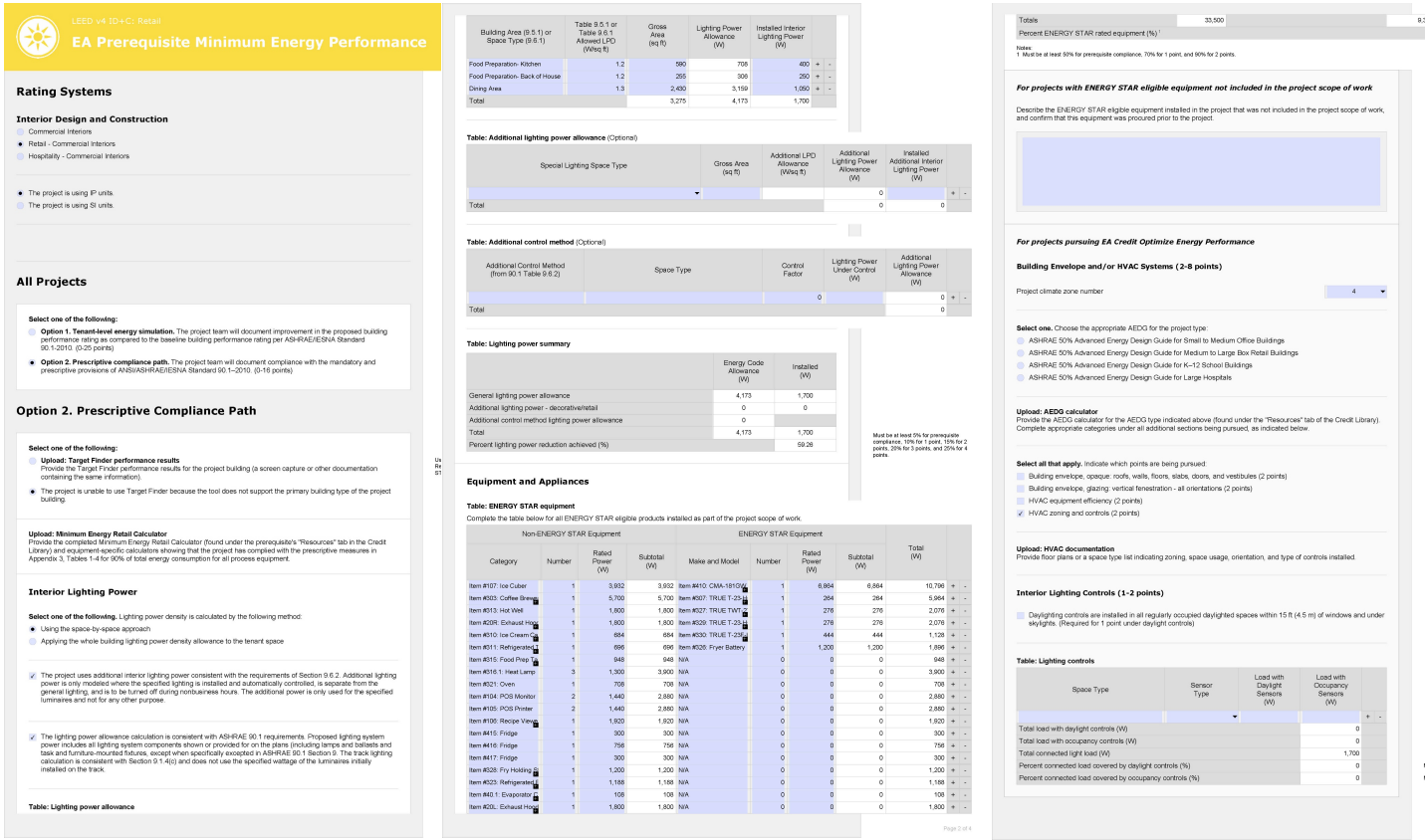
AIR LAND RAIL SEA

Typical Credit Template & Backup Documentation- Energy and Atmosphere

<u>EAc Optimize Energy Performance</u>

1. Provide completed template that identifies compliance Strategy. All interior projects should choose prescriptive method and provide.
   a) Lighting Power Density
   b) Percentage of Energy Star Appliances
   c) Percentage of spaces with HVAC controls.
   d) AEDG compliance
   e) Percentage of spaces with Lighting Controls.

2. Provide Lighting Power Density calcs and lighting cutsheets.



PORT AUTHORITY NY NJ
AIR LAND RAIL SEA

Typical Credit Template And Backup Documentation- Energy and Atmosphere

COMcheck Software Version 4.1.1.0

Interior Lighting Compliance Certificate

Project Information

Energy Code:	2016 New York City Energy Conservation Code
Project Title:	[redacted]
Project Type:	New Construction
Permit Date:	2019.06.19

Construction Site:
New York, NY 11371

Owner/Agent: [redacted]

Designer/Contractor: [redacted]

Additional Efficiency Package(s)

Reduced interior lighting power. Requirements are implicitly enforced within interior lighting allowance calculations.

Allowed Interior Lighting Power

A Area Category	B Floor Area (ft2)	C Allowed Watts / ft2	D Allowed Watts (B X C)
1-Kitchen (Common Space Types:Food Preparation)	590	1.09	643
2-Back of House (Common Space Types:Food Preparation)	255	1.09	278
3-Dining Area (Common Space Types:Dining Area - Family Restaurant)	2430	0.80	1944
		Total Allowed Watts =	2865

Proposed Interior Lighting Power

A Fixture ID : Description / Lamp / Wattage Per Lamp / Ballast	B Lamps/ Fixture	C # of Fixtures	D Fixture Watt.	E (C X D)
1-Kitchen (Common Space Types:Food Preparation)				
LED 1: E: Other:	1	8	50	400
2-Back of House (Common Space Types:Food Preparation)				
LED 2: D: Other:	1	5	50	250
3-Dining Area (Common Space Types:Dining Area - Family Restaurant)				
LED 3: A: Other:	1	9	50	450
LED 4: C: Other:	1	4	50	200
LED 5: G: Other:	1	3	50	150
LED 6: D: Other:	1	5	50	250
		Total Proposed Watts =		1700

Interior Lighting PASSES: Design 41% better than code

Interior Lighting Compliance Statement

Compliance Statement: The proposed interior lighting design represented in this document is consistent with the building plans, specifications, and other calculations submitted with this permit application. The proposed interior lighting systems have been designed to meet the 2016 New York City Energy Conservation Code requirements in COMcheck Version 4.1.1.0 and to comply with any applicable mandatory requirements listed in the Inspection Checklist.

Project Title: Laguardia- Mulberry Street (HH4L) Report date: 06/19/19
Data filename: P:\4096-E01\Documents\Calcs\Electrical\Comcheck6.19.19.cck Page 1 of 6

LIGHTOLIER by Signify

Downlighting

EasyLyte

Z6RDL 6" Round Aperture

Adaptable, and flexible for your changing project needs. It is your best choice without sacrificing ease of installation or product quality.

Project:
Location:
Cat.No:
Type:
Lamps: Qty:
Notes:

Frame (frame + trim = complete product) example: 6RN

Series	Aperture	Installation	Options
6 6-inch Non-IC	R Round	N New construction (Non-IC) R Remodeler (Non-IC) A AirSeal (IC)[1]	– Universal 120/277V (specify for Power Over Ethernet) LC Chicago Plenum[2] EM Emergency[4] 3 347V (not compatible with ELV dimming) 3IP 347V with Interact Pro (for use with 0-10V engines only)[2,3] IP Interact Pro (for use with 0-10V engines only)[2,3]

Trim example: Z4RDL20835WOCDZ10U

Series	Lumen	CRI/CCT	Beam	Style	Reflector
Z6RDL EasyLyte 6-inch Round	10 1000 lm 15 1500 lm 20 2000 lm 25 2500 lm 30 3000 lm 35 3500 lm	827 80 CRI / 2700 K 830 80 CRI / 3000 K 835 80 CRI / 3500 K 840 80 CRI / 4000 K	W Wide	O Open S Step baffle	CD Clear diffuse (painted finish) BK Black (matte) WH White (matte)

Dimming	Voltage
Z10 0-10V 1%	U Universal 120/277/347V
L Lutron LDE1 EcoSystem (fade-to-black)	
ELV ELV[5]	1 120V
P Power over Ethernet (PoE)	E Ethernet 48 V DC
Only compatible with 1000 (10) to 2500 (25) lumen options	

1. There is a 3000 lm (30) limit with 6" (6RA) IC housings.
2. Interact Pro (IP), Emergency (EM) and Chicago Plenum (LC) are only available with New construction (N) installs.
3. Integral Interact Pro RF sensor enables network lighting control; to be specified with 0-10V light engines only.
4. Emergency (EM) frame comes with emergency battery pack and ceiling mountable test switch.
5. ELV (E) dimming is only compatible with 1000 lm (10), 1500 lm (15), 2000 lm (20) configurations.

Note: Consult factory for additional dimming options.

IC INSULATION CONTACT · cULus LISTED · WET LOCATION · RoHS COMPLIANT · ENERGY STAR · interact ready.

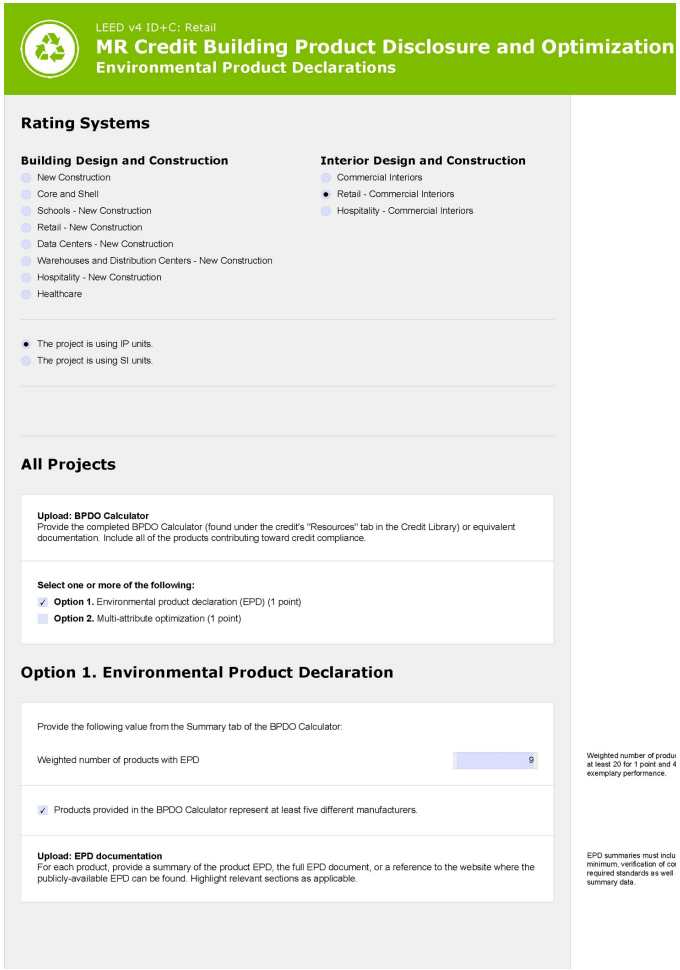
PORT AUTHORITY NY NJ
AIR LAND RAIL SEA

Typical Credit Template And Backup Documentation- Materials & Resources

MRc BPDO: EPD

1. Provide completed template that identifies compliance Strategy and provides results from materials calculator.

2. Provide material calculations as well as environmental product declarations for materials claimed.



LEED v4 ID+C: Retail

MR Credit Building Product Disclosure and Optimization
Environmental Product Declarations

Rating Systems

Building Design and Construction
- New Construction
- Core and Shell
- Schools - New Construction
- Retail - New Construction
- Data Centers - New Construction
- Warehouses and Distribution Centers - New Construction
- Hospitality - New Construction
- Healthcare

Interior Design and Construction
- Commercial Interiors
- Retail - Commercial Interiors
- Hospitality - Commercial Interiors

- The project is using IP units.
- The project is using SI units.

All Projects

Upload: BPDO Calculator
Provide the completed BPDO Calculator (found under the credit's "Resources" tab in the Credit Library) or equivalent documentation. Include all of the products contributing toward credit compliance.

Select one or more of the following:
- ✓ **Option 1.** Environmental product declaration (EPD) (1 point)
- **Option 2.** Multi-attribute optimization (1 point)

Option 1. Environmental Product Declaration

Provide the following value from the Summary tab of the BPDO Calculator:

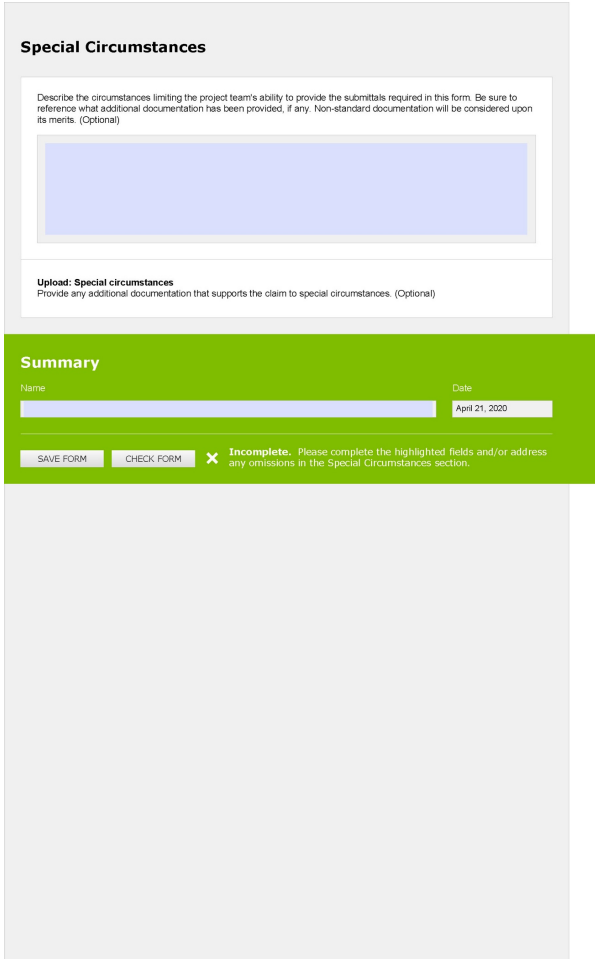
Weighted number of products with EPD: 9

Weighted number of produ
at least 20 for 1 point and 4
exemplary performance.

- ✓ Products provided in the BPDO Calculator represent at least five different manufacturers.

Upload: EPD documentation
For each product, provide a summary of the product EPD, the full EPD document, or a reference to the website where the publicly-available EPD can be found. Highlight relevant sections as applicable.

EPD summaries must inclu
minimum, verification of co
required standards as well
summary data.



Special Circumstances

Describe the circumstances limiting the project team's ability to provide the submittals required in this form. Be sure to reference what additional documentation has been provided, if any. Non-standard documentation will be considered upon its merits. (Optional)

Upload: Special circumstances
Provide any additional documentation that supports the claim to special circumstances. (Optional)

Summary

Name

Date: April 21, 2020

SAVE FORM | CHECK FORM | ✕ **Incomplete.** Please complete the highlighted fields and/or address any omissions in the Special Circumstances section.

PORT AUTHORITY NY NJ
AIR LAND RAIL SEA

Typical Credit Template And Backup Documentation- Materials & Resources

Environmental Product Declarations

Complete all columns with applicable material data for the attempted options. If the option is not attempted, leave the column blank.

General Information (from Materials tab)			Option 1 Environmental Product Declaration			Option 2 Multi-Attribute Optimization		
Material Description	Is the material structure or enclosure?	Material Cost	EPD Program Operator	EPD Type	Weighted EPD Value (#)	Third Party Certification Program	Does the entire product meet local criteria?	Total Sustainable Criteria Value with Location Valuation Factor ($)
BRK-01	No							$ -
FRP-01	No			Product-specific Type III	1.00			$ -
GR-01	No			Product-specific Type III	1.00			$ -
LAM-01	No			Product-specific Type III	1.00			$ -
LAM-02	No			Product-specific Type III	1.00			$ -
MTL-01	No							$ -
MTL-02	No							$ -
PT-01	No			Product-specific Type III	1.00			$ -
RES-01	No			Product-specific Type III	1.00			$ -
RESB-01	No			Product-specific Type III	1.00			$ -
ST-01	No							$ -
TL-01	No			Industry-wide (generic)	0.50			$ -
TLB-01	Yes							$ -
TS-01	No							$ -
TS-02	No							$ -
TXT-01	No							$ -
TXT-02	No							$ -
TXT-03	No							$ -
TXT-04	No							$ -
WD-01	Yes							$ -
PT-02	No			Product-specific Type III	1.00			$ -
WC-01	No			Product-specific Type III	1.00			$ -
WD-02	No							$ -
			Weighted number of products with EPD		9	Total sustainable criteria value with location valuation factor		$ -

ENVIRONMENTAL PRODUCT DECLARATION

DRYWALL GRID SYSTEM

Armstrong CEILING SOLUTIONS

Committed to Sustainability.

Armstrong World Industries is committed to delivering solutions that reduce the environmental impact of the buildings you create; from product design and raw material selection, to how our products are produced and delivered.

Now we provide Environmental Product Declarations (EPD's) to document the sustainability of our products. Inside this UL Environment certified ISO compliant EPD you will find:

- Performance features like fire, humidity, corrosion, and seismic
- Product application and use
- Product ingredients and their sources
- Information on how suspension systems are produced
- Life Cycle Assessment (LCA) results including global warming potential and primary energy usage
- Total impacts over the life cycle of the product

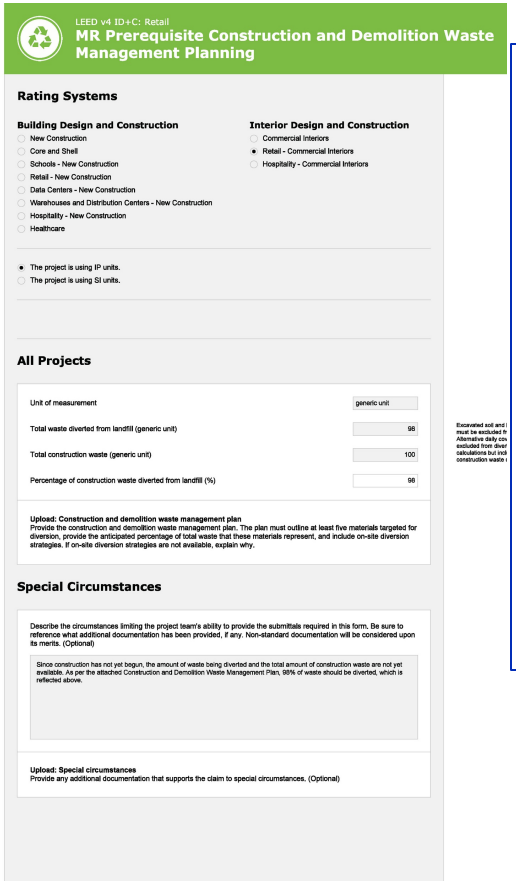
UL CERTIFIED ENVIRONMENTAL PRODUCT DECLARATION UL.COM/EPD

Typical Credit Template And Backup Documentation- Construction and Demolition Waste Management

<u>MRc Construction and Demolition Waste Management</u>

1. Provide completed template that Demonstrates compliance .

2. Provide excerpt from contract documents where the requirements of the credit are made to the contractor or provide a copy of a construction waste management plan created by the contractor.



LEED v4 ID+C: Retail

MR Prerequisite Construction and Demolition Waste Management Planning

Rating Systems

Building Design and Construction

- ○ New Construction
- ○ Core and Shell
- ○ Schools - New Construction
- ○ Retail - New Construction
- ○ Data Centers - New Construction
- ○ Warehouses and Distribution Centers - New Construction
- ○ Hospitality - New Construction
- ○ Healthcare

Interior Design and Construction

- ○ Commercial Interiors
- ● Retail - Commercial Interiors
- ○ Hospitality - Commercial Interiors

- ● The project is using IP units.
- ○ The project is using SI units.

All Projects

Unit of measurement	generic unit
Total waste diverted from landfill (generic unit)	98
Total construction waste (generic unit)	100
Percentage of construction waste diverted from landfill (%)	98

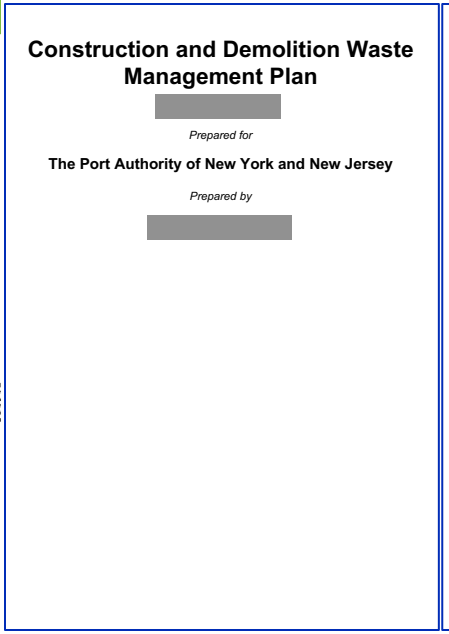
Upload: Construction and demolition waste management plan
Provide the construction and demolition waste management plan. The plan must outline at least five materials targeted for diversion, provide the anticipated percentage of total waste that these materials represent, and include on-site diversion strategies. If on-site diversion strategies are not available, explain why.

Special Circumstances

Describe the circumstances limiting the project team's ability to provide the submittals required in this form. Be sure to reference what additional documentation has been provided, if any. Non-standard documentation will be considered upon its merits. (Optional)

Since construction has not yet begun, the amount of waste being diverted and the total amount of construction waste are not yet available. As per the attached Construction and Demolition Waste Management Plan, 98% of waste should be diverted, which is reflected above.

Upload: Special circumstances
Provide any additional documentation that supports the claim to special circumstances. (Optional)



Construction and Demolition Waste Management Plan

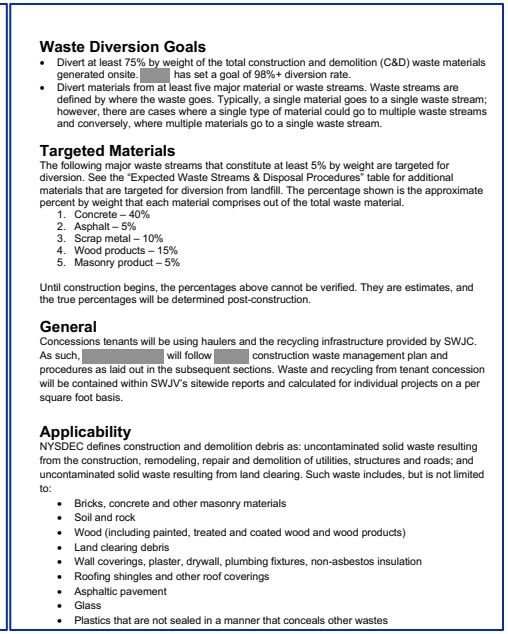
[redacted]

Prepared for

The Port Authority of New York and New Jersey

Prepared by

[redacted]



Waste Diversion Goals

- Divert at least 75% by weight of the total construction and demolition (C&D) waste materials generated onsite. [redacted] has set a goal of 98%+ diversion rate.
- Divert materials from at least five major material or waste streams. Waste streams are defined by where the waste goes. Typically, a single material goes to a single waste stream; however, there are cases where a single type of material could go to multiple waste streams and conversely, where multiple materials go to a single waste stream.

Targeted Materials

The following major waste streams that constitute at least 5% by weight are targeted for diversion. See the "Expected Waste Streams & Disposal Procedures" table for additional materials that are targeted for diversion from landfill. The percentage shown is the approximate percent by weight that each material comprises out of the total waste material.

1. Concrete – 40%
2. Asphalt – 5%
3. Scrap metal – 10%
4. Wood products – 15%
5. Masonry product – 5%

Until construction begins, the percentages above cannot be verified. They are estimates, and the true percentages will be determined post-construction.

General

Concessions tenants will be using haulers and the recycling infrastructure provided by SWJC. As such, [redacted] will follow [redacted] construction waste management plan and procedures as laid out in the subsequent sections. Waste and recycling from tenant concession will be contained within SWJV's sitewide reports and calculated for individual projects on a per square foot basis.

Applicability

NYSDEC defines construction and demolition debris as: uncontaminated solid waste resulting from the construction, remodeling, repair and demolition of utilities, structures and roads; and uncontaminated solid waste resulting from land clearing. Such waste includes, but is not limited to:

- Bricks, concrete and other masonry materials
- Soil and rock
- Wood (including painted, treated and coated wood and wood products)
- Land clearing debris
- Wall coverings, plaster, drywall, plumbing fixtures, non-asbestos insulation
- Roofing shingles and other roof coverings
- Asphaltic pavement
- Glass
- Plastics that are not sealed in a manner that conceals other wastes

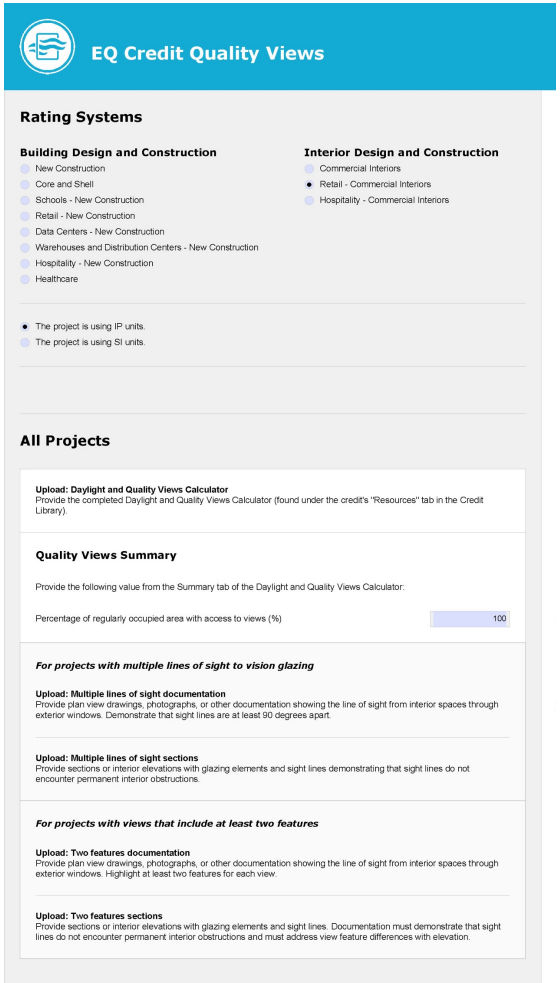
PORT AUTHORITY NY NJ
AIR LAND RAIL SEA

Typical Credit Template And Backup Documentation- Indoor Environmental Quality

EQc Quality Views

1. Provide completed template that Demonstrates the percentage of spaces required to have views to the outdoors in order to achieve compliance with the credit.

2. Provide excerpt from contract documents (drawings) that graphically demonstrate the claims made on the template.



EQ Credit Quality Views

Rating Systems

Building Design and Construction
- New Construction
- Core and Shell
- Schools - New Construction
- Retail - New Construction
- Data Centers - New Construction
- Warehouses and Distribution Centers - New Construction
- Hospitality - New Construction
- Healthcare

Interior Design and Construction
- Commercial Interiors
- Retail - Commercial Interiors
- Hospitality - Commercial Interiors

- The project is using IP units.
- The project is using SI units.

All Projects

Upload: Daylight and Quality Views Calculator
Provide the completed Daylight and Quality Views Calculator (found under the credit's "Resources" tab in the Credit Library).

Quality Views Summary

Provide the following value from the Summary tab of the Daylight and Quality Views Calculator:

Percentage of regularly occupied area with access to views (%) 100

For projects with multiple lines of sight to vision glazing

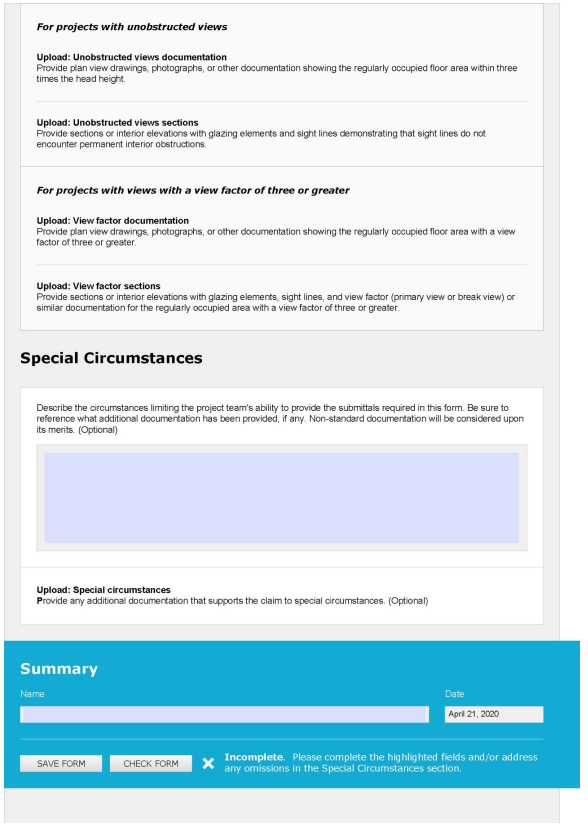
Upload: Multiple lines of sight documentation
Provide plan view drawings, photographs, or other documentation showing the line of sight from interior spaces through exterior windows. Demonstrate that sight lines are at least 90 degrees apart.

Upload: Multiple lines of sight sections
Provide sections or interior elevations with glazing elements and sight lines demonstrating that sight lines do not encounter permanent interior obstructions.

For projects with views that include at least two features

Upload: Two features documentation
Provide plan view drawings, photographs, or other documentation showing the line of sight from interior spaces through exterior windows. Highlight at least two features for each view.

Upload: Two features sections
Provide sections or interior elevations with glazing elements and sight lines. Documentation must demonstrate that sight lines do not encounter permanent interior obstructions and must address view feature differences with elevation.



For projects with unobstructed views

Upload: Unobstructed views documentation
Provide plan view drawings, photographs, or other documentation showing the regularly occupied floor area within three times the head height.

Upload: Unobstructed views sections
Provide sections or interior elevations with glazing elements and sight lines demonstrating that sight lines do not encounter permanent interior obstructions.

For projects with views with a view factor of three or greater

Upload: View factor documentation
Provide plan view drawings, photographs, or other documentation showing the regularly occupied floor area with a view factor of three or greater.

Upload: View factor sections
Provide sections or interior elevations with glazing elements, sight lines, and view factor (primary view or break view) or similar documentation for the regularly occupied area with a view factor of three or greater.

Special Circumstances

Describe the circumstances limiting the project team's ability to provide the submittals required in this form. Be sure to reference what additional documentation has been provided, if any. Non-standard documentation will be considered upon its merits. (Optional)

Upload: Special circumstances
Provide any additional documentation that supports the claim to special circumstances. (Optional)

Summary

Name

Date April 21, 2020

SAVE FORM CHECK FORM ✕ **Incomplete.** Please complete the highlighted fields and/or address any omissions in the Special Circumstances section.

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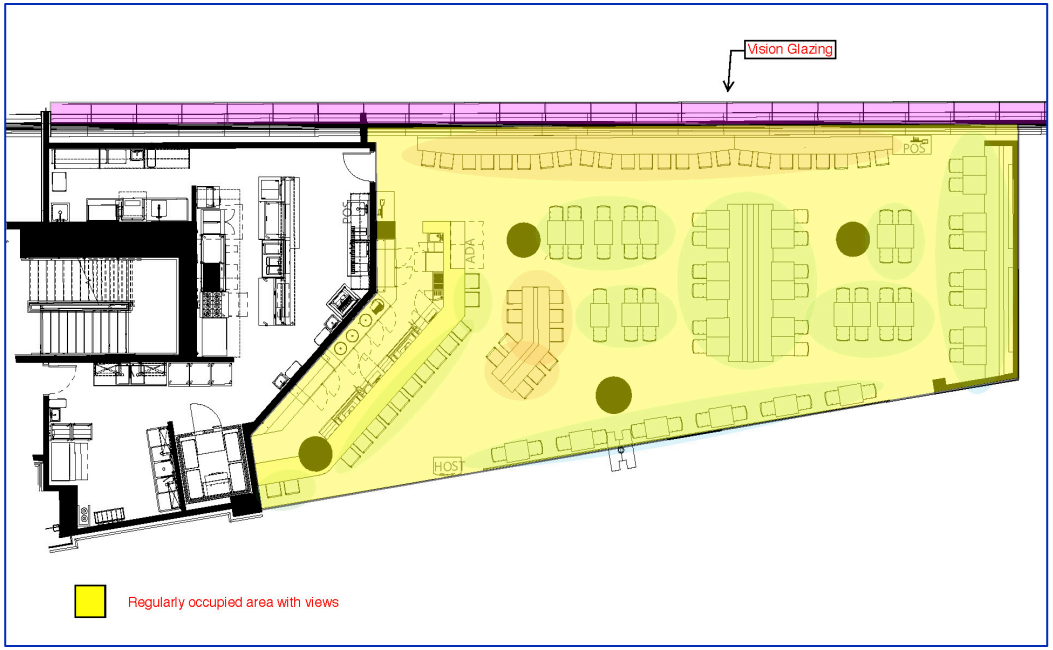
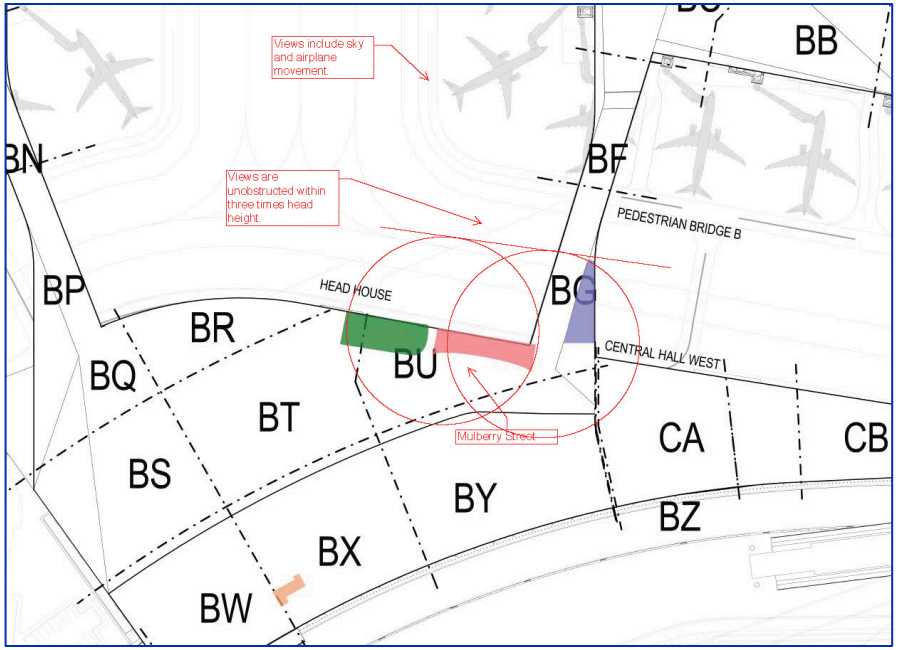
Typical Credit Template And Backup Documentation- Indoor Environmental Quality



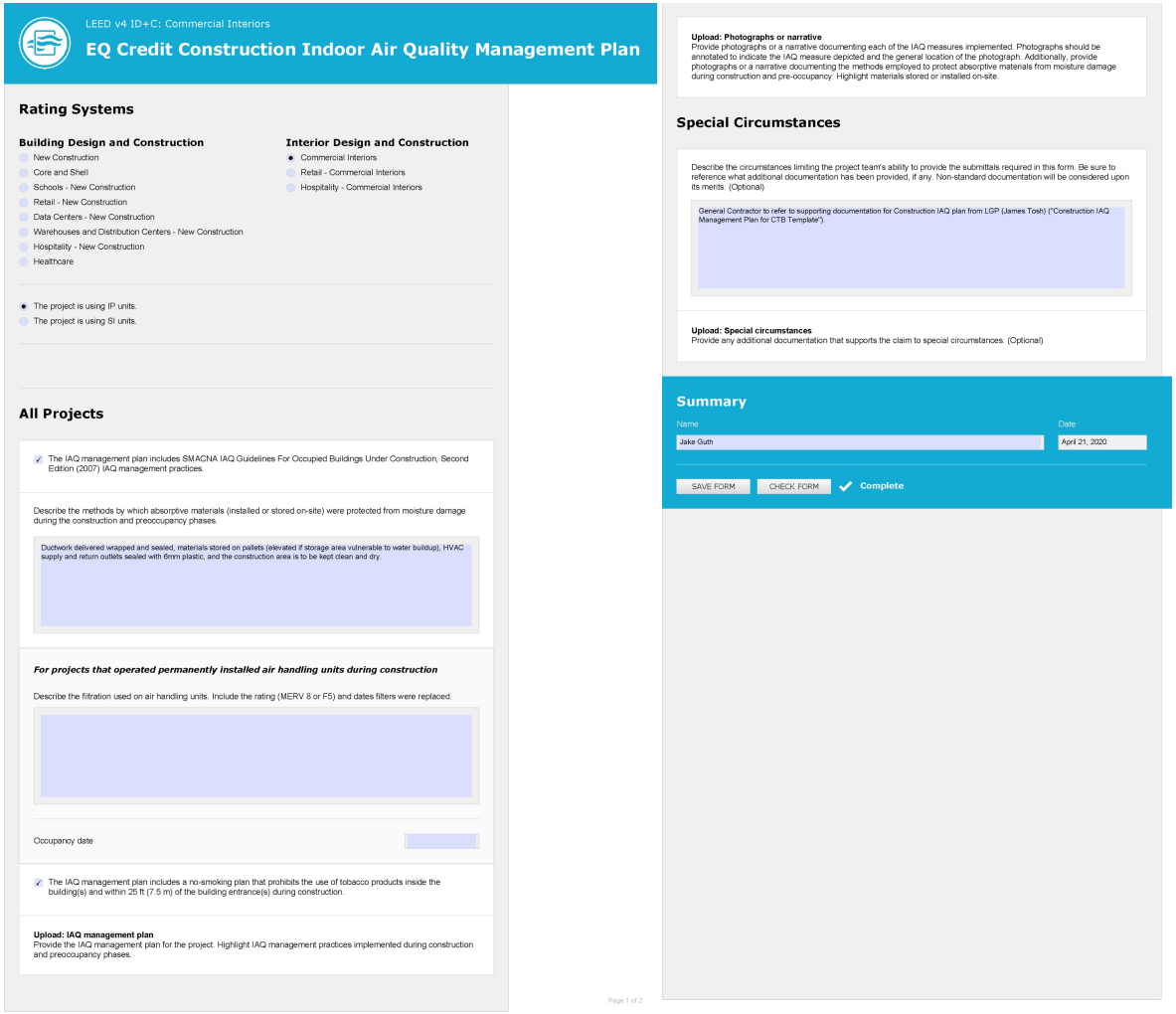


Typical Credit Template And Backup Documentation- Indoor Environmental Quality

<u>EQc Construction Indoor Air Quality Management Plan</u>

1. Provide completed template that Demonstrates compliance .

2. Provide either an excerpt from contract documents that conveys the requirements of the credit to the contractor or provide a copy of the Construction Indoor Air Quality Management Plan created by the contractor.



LEED v4 ID+C: Commercial Interiors

EQ Credit Construction Indoor Air Quality Management Plan

Rating Systems

Building Design and Construction
- New Construction
- Core and Shell
- Schools - New Construction
- Retail - New Construction
- Data Centers - New Construction
- Warehouses and Distribution Centers - New Construction
- Hospitality - New Construction
- Healthcare

Interior Design and Construction
- Commercial Interiors
- Retail - Commercial Interiors
- Hospitality - Commercial Interiors

- The project is using IP units.
- The project is using SI units.

All Projects

☑ The IAQ management plan includes SMACNA IAQ Guidelines For Occupied Buildings Under Construction, Second Edition (2007) IAQ management practices.

Describe the methods by which absorptive materials (installed or stored on-site) were protected from moisture damage during the construction and preoccupancy phases.

Ductwork delivered wrapped and sealed, materials stored on pallets (elevated if storage area vulnerable to water buildup), HVAC supply and return outlets sealed with 6mm plastic, and the construction area is to be kept clean and dry.

For projects that operated permanently installed air handling units during construction

Describe the filtration used on air handling units. Include the rating (MERV 8 or F5) and dates filters were replaced.

Occupancy date

☑ The IAQ management plan includes a no-smoking plan that prohibits the use of tobacco products inside the building(s) and within 25 ft (7.5 m) of the building entrance(s) during construction.

Upload: IAQ management plan
Provide the IAQ management plan for the project. Highlight IAQ management practices implemented during construction and preoccupancy phases.

Page 1 of 2

Upload: Photographs or narrative
Provide photographs or a narrative documenting each of the IAQ measures implemented. Photographs should be annotated to indicate the IAQ measure depicted and the general location of the photograph. Additionally, provide photographs or a narrative documenting the methods employed to protect absorptive materials from moisture damage during construction and pre-occupancy. Highlight materials stored or installed on-site.

Special Circumstances

Describe the circumstances limiting the project team's ability to provide the submittals required in this form. Be sure to reference what additional documentation has been provided, if any. Non-standard documentation will be considered upon its merits. (Optional)

General Contractor to refer to supporting documentation for Construction IAQ plan from LGP (James Tosh) ("Construction IAQ Management Plan for CTB Template").

Upload: Special circumstances
Provide any additional documentation that supports the claim to special circumstances. (Optional)

Summary

Name: Jake Guth

Date: April 21, 2020

SAVE FORM | CHECK FORM | ✔ Complete

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Typical Credit Template And Backup Documentation- Indoor Environmental Quality

Port Authority of New York and New Jersey

[redacted]

Project

Construction Indoor Air Quality Management Plan

1. Overview

This Indoor Air Quality (IAQ) Management Plan is to be followed by all [redacted] and subcontractor personnel during the construction of the [redacted] Project. By effectively administering this IAQ Management Plan, we intend to prevent the development of IAQ issues in the buildings and contribute to the comfort and wellbeing of the occupants of this building.

The plan outlines the type of pollutants that may be found on the project, areas of the project that may be affected, and the activities that are likely to produce these pollutants. The plan also contains the required measures of the IAQ.

The objectives of this plan are to:

1. Protect construction workers and future building occupants from indoor air quality problems resulting from construction activities; and
2. Meet the requirements of the LEED v4 credit: "Construction IAQ Management Plan"

[redacted] will monitor, implement and document this plan throughout the construction of this project. Monitoring of on-site compliance with this plan will be performed by the [redacted] Site Superintendent or [redacted] Managers. [redacted] will monitor materials used on-site by reviewing the submitted cut sheets of products likely to contain VOCs, such as adhesives, sealants, paints, solvents, and cleaning supplies. Members of the [redacted] Project Team will make periodic on-site inspections to check that contractors are using only approved products onsite. [redacted] LEED Coordinator will make site inspections to review overall compliance with the plan.

Documentation of the plan will consist of the following:

- Photographs of measures taken during construction to show consistent adherence to the Construction IAQ plan. No less than six (6) photographs are to be taken on each of three (3) different occasions. Each photograph submitted should identify a specific SMACNA compliance measure.
- Compilation of cut sheets of products likely to contain VOCs. [redacted] will follow up to insure cut sheets to include VOCs information.
- Log of the filter media used during construction compiled by the HVAC Foreman and submitted to [redacted]
- Construction IAQ Summary Report completed at the end of the project containing a summary of the measures taken during construction to comply with this plan.

Communication Plan:

6. Control Measures

The following control measures must be adhered to during the construction of this project. The measures are in accordance with SMACNA IAQ Guidelines for Occupied Building under Construction, 2nd Edition 2007, ANSI/SMACNA 008-2008 Chapter 3.

HVAC Protection

All HVAC equipment must be protected from collecting dust and odors (which can "stick" to porous materials in the system and later be released). The following measures should be utilized to protect the equipment. [redacted] will randomly check the ductwork and associated equipment throughout the construction process to help ensure compliance with this Construction IAQ Management Plan. All ductwork should arrive at the site clean and free from debris. The ends of the ductwork should be sealed with plastic until installed and any ductwork that is open at the end of the day must be sealed with plastic.

Do not operate permanently installed air-handling equipment during construction unless filtration media with a minimum efficiency reporting value (MERV) of 8, as determined by ASHRAE 52.2–2007, with errata (or equivalent filtration media class of F5 or higher, as defined by CEN Standard EN 779–2002, Particulate Air Filters for General Ventilation, Determination of the Filtration Performance, [East Asia ACP: Construction IAQ Equivalent]), are installed at each return air grille and return or transfer duct inlet opening such that there is no bypass around the filtration media.

Return Side of HVAC

Special attention must be paid to the location of all return vents, ducts, plenums and shafts when the HVAC is activated due to the ability of these returns to draw in various dust and odors. The use of the HVAC system will be avoided during construction. If the HVAC system must be used during construction, the return side of the HVAC system will be shut down whenever possible during heavy construction or demolition.

Central Filtration

In areas where major dust loading is expected to impact operating HVAC systems or if you are using HVAC systems or equipment during construction, then you must install MERV 8 filtration media or better; (filters with 30 – 50% dust-spot efficiency). After construction is complete, replace filters with MERV 13 filtration media or better; (filters with 80 – 90% dust-spot efficiency). Where other control options for construction related odors are not deemed effective,

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Sustainable Design – Common Challenges

1. Projects not attempting all ***applicable*** and ***achievable*** credits
   a) Interior Design Projects can utilize some base building components to meet some credit criteria. The PANYNJ can provide you with some of the Location and Transportation credit documentation for your facility.
   b) Project without HVAC Scope can still achieve points under the Advanced Refrigerant Management and Optimize Energy Credits.
   c) Tenants are encouraged to coordinate with SDM on Location and Transportation credits that have already been documented by the PANYNJ.
   d) Tenants are encouraged to visit the USGBC website for applicable Innovation and Regional Priority Credits

2. Projects attempting credits not appropriate for the scope
   a) Interior Projects cannot use base building credits that they did not contribute to.

3. Design vs Construction Credits.
   a) Projects under 20,000 sq.ft. can achieve construction based credits during the design review process by making the requirements of the credit part of the construction contract. Credits such as Construction and Demolition Waste Management, Construction Indoor Air Quality Management and the Material Optimization Credits fall under this category.

4. Projects not meeting credit performance thresholds.
   a) Projects with limited number of construction materials can still demonstrate best efforts to adhere to the requirements of any three Building Product Disclosure and Optimization credits or Low Emitting Material Credits can be awarded points at the discretion of the SDM.

TYPICAL CREDIT TEMPLATE WALK-THROUGH

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QUESTIONS?

What is the most important thing you learned today?

Thank You!