



# LEED 2009 for Retail: Commercial Interiors

## WE PREREQUISITE 1: WATER USE REDUCTION

### 20% REDUCTION

All fields and uploads are required unless otherwise noted.

## FIXTURES, FITTINGS AND APPLIANCES

This static sample form has been modified for offline access. All sections of the form are visible. Sample forms are for reference only.

The Table WEp1-1. Daily Occupancy below is a linked submittal from PI Form 3: Occupant and Usage Data to be used for reference only. PI Form 3 must be completed before values will display in WE Prerequisite 1. These values should inform, but not necessarily parallel, the numbers entered in the Table WEp1-2. Fixture Groups Definition.

**Table WEp1-1.** Daily Occupancy

FTE	Average Transients (Student/ Visitor)	Average Retail Customers	Residents	Total

Select one of the following:

- ☐ **Tenant Space Fixtures Only.** Fixtures and fixture fittings located only within the tenant space meet the needs of the occupants. Tenant occupants will not use fixtures and fixture fittings located outside the tenant space.
- ☐ **Outside Fixtures Only.** Fixtures and fixture fittings located only outside the tenant space meet the needs of the occupants. There are no fixtures or fixture fittings located inside the tenant space.
- ☐ **Both - Outside Fixtures Included.** Fixture and fixture fittings located both within and outside the tenant space meet the needs of the occupants. The project team is pursuing water use savings for these fixtures and fixture fittings, including those located outside the tenant space whether existing or installed and/or upgraded as part of the project.
- ☐ **Both - Outside Fixtures Excluded.** Fixture and fixture fittings located both within and outside the tenant space meet the needs of the occupants. However the water use savings will exclude the fixtures and fixture fittings located outside the tenant space.

*Note: The project team is exempt from WE Prerequisite 1. The project team can document compliance with WE Credit 1 for the fixtures and fixture fittings located outside the tenant space that meet the needs of the tenant occupancy.*

☐ The project team is pursuing WE Credit 1 (Optional).

*Note: To document compliance with the water use reduction requirements for WE Credit 1 complete the calculations below for the fixtures and fixture fittings located outside the tenant space that meets the needs of the tenant occupancy ONLY. Refer to the WE Credit 1 form for summary data and points documented.*

The project is not eligible to pursue WE Credit 1. The following calculations should only include fixtures and fixture fittings within the tenant space.

### Fixture Groups Introduction

This table allows for project occupants to be organized in a way that best represents fixture usage patterns in the project space. Occupants can be grouped together or separated into sub-groups at the option of the project team. The usage groups defined must be derived from daily occupancy data for the project space. Accordingly, all project occupants, as recorded in the Daily Occupancy tables from PI Form 3: Occupant and Usage Data must be represented in the Table WEp1-2. Fixture Groups Definition below. All residential occupants should be represented separately from non-residential occupants. Refer to the additional guidance document in the Credit Resources section.

**Table WEp1-2.** Fixture Groups Definition

Group Name	Annual Days of Operation	FTE	Transients (Visitors)	Retail Customers	Residents	% Female	% Male

Briefly describe the inputs in the Table WEp1-2. Fixture Groups Definition. Explain the methodology used to define each fixture group, as well as the derivation of data in each row. Additionally, provide a detailed explanation if the default gender ratio is not used.

**Table WEp1-3.** Flush Fixture Data

Enter flush fixture data for each fixture group defined in the Table WEp1-2. Fixture Groups Definition.

*Note : Click "Calculate" in the summary section of the table to perform the water savings calculations. "Calculate" must be clicked after any or all the data is entered in the table to refresh the calculated values and obtain accurate information.*

Fixture Groups							Flush Rate (GPF)		Annual Water Consumption (kGal)	
Select	Display	Fixture ID <sup>1</sup>	Fixture Family	Fixture Type	Default	Total Daily Uses <sup>2</sup>	Baseline	Installed <sup>3</sup>	IPC/UPC Baseline	Performance Case
					<input type="checkbox"/>					
Total calculated flush fixture water use annual volume, baseline case (kGal)										
Total calculated flush fixture water use annual volume, performance case (kGal)										
Percent reduction of water use in flush fixtures (%)										

**Notes:**

1. Define a reference name or descriptor that can be used to identify each fixture family/type.
2. May be modified for special circumstances. Deselect the "Default" checkbox in order to insert the modified Total Daily Uses value. Provide a narrative and upload daily use calculations to justify modifications. Refer to the additional guidance document in the Credit Resources section, which includes information about fixture groups that do not include urinals.
3. To account for dual-flush fixtures, enter a weighted average flush rate. Refer to the additional guidance document in the Credit Resources section.

**Table WEp1-4. Flow Fixture Data (Optional)**

Enter flow fixture data for each fixture group defined in the Table WEp1-2. Fixture Groups Definition.

*Note : Click "Calculate" in the summary section of the table to perform the water savings calculations. "Calculate" must be clicked after any or all the data is entered in the table to refresh the calculated values and obtain accurate information.*

Fixture Groups								Flow Rate (GPM / GPC)		Annual Water Consumption (kGal)	
Select	Display	Fixture ID <sup>1</sup>	Fixture Family	Fixture Type	Default	Total Daily Uses <sup>2</sup>	Duration <sup>3</sup> (Secs)	Baseline	Installed <sup>4</sup>	IPC/UPC Baseline	Performance Case
					<input type="checkbox"/>						

Total calculated flow fixture water use annual volume, baseline case (kGal)	
Total calculated flow fixture water use annual volume, performance case (kGal)	
Percent reduction of water use in flow fixtures (%)	

**Notes:**

1. Define a reference name or descriptor that can be used to identify each fixture family/type.
2. May be modified for special circumstances. Deselect the "Default" checkbox in order to insert the modified Total Daily Uses value. Provide a narrative and upload daily use calculations to justify modifications. Refer to the additional guidance document in the Credit Resources section.
3. May be modified for special circumstances. Provide a narrative in the Special Circumstances section below to justify modifications.
4. For public metering/autocontrol lavatory faucets, convert all flow rates in gallons per minute (GPM) to gallons per cycle (GPC) using a default 12 second duration of flow. Provide a narrative or calculations to support the installed flow rate. The "Duration" is not applicable and therefore should not be modified.

☐ The project building includes pre-rinse spray valve(s).

Flow rate of the pre-rinse spray valve(s) installed on the project:

GPM

*Note: The flow rate for all pre-rinse spray valves must be less than or equal to 1.6 gpm. If there are multiple fixtures with varying flow rates, insert the highest flow rate.*

**Upload WEp1-1.** Provide the plumbing fixture and fitting schedule for the project highlighting flush and flowrates for all applicable plumbing fixtures and fittings within the project scope.

**Table WEp1-5. Flush & Flow Fixtures Summary Statistics**

Total calculated fixture water use annual volume, baseline case (kGal)	
Total calculated fixture water use annual volume, performance case (kGal)	
Percent reduction of water use in all fixtures (%)	

*A 20% reduction of water use in fixtures is required to document compliance with WE Prerequisite 1.*

## PROCESS WATER USE

**Table WEp1-6. Process Equipment Data**

Complete the table below. If "Other" is selected, Water Use Rate units must be expressed in terms of gallons (e.g., gal/rack, gal/100lbs of ice, etc.). *Note: If project does not include clothes washers, dishwashers, ice machines, food steamers or combination ovens, leave the following table blank.*

Equipment ID	Equipment Family	Equipment Type	ADO	Cycles / Day	Daily Usage Multiplier	Water Use Rate			Annual Water Consumption (kGal)	
						Baseline	Installed	Units	IPC/UPC Baseline	Performance Case
Total calculated annual process water use, baseline case (kGal)										
Total calculated annual process water use, performance case (kGal)										
Percentage reduction of water use in process water equipment										

A 20% reduction of process water use is required to document compliance with WE Prerequisite 1.

- ☐ The project includes water cooled ice machines (Optional)
  - ☐ Project has installed NO once through water cooled ice machines
  - ☐ Any water cooled ice machines are connected to a chilled loop system.

## ADDITIONAL DETAILS

- ☐ Special circumstances preclude documentation of prerequisite compliance with the submittal requirements outlined in this form.

## 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.

**Upload WEp1-SC.** Provide any additional documentation that supports the claim to special circumstances. (Optional)

- ☐ The project team is using an alternative compliance approach in lieu of standard submittal paths.

## ALTERNATIVE COMPLIANCE PATH

Describe the alternative compliance path used by the project team. Include justification that this path meets the credit intent and requirements. Be sure to reference what additional documentation has been provided, if any. Non-standard documentation will be considered upon its merits.

**Upload WEp1-ACP.** Provide any additional documents that support the alternative compliance path approach. (Optional)

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## SUMMARY

WE Prerequisite 1: Water Use Reduction - 20% Reduction  
Compliance Documented:

REFERENCE ONLY