

Energy Metering Summary **All Zones MTR-SUM**

Project Info	Project Address	Date
		For Building Department Use
	Applicant Name:	
	Applicant Address:	
	Applicant Phone:	

Description	<input type="checkbox"/> New Building <input type="checkbox"/> Addition <input type="checkbox"/> Alteration <input type="checkbox"/> Change of Use
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Table 12-1 Energy Meter Summary (enter values as applicable)

Energy Service	Service Capacity	Total Meter for Building	Meter Type
Electric Service	kVa	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Renewable Electric	kVa	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Gas Service	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Steam Supply	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Geothermal	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No	
Renewable Thermal	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No	

Notes:

Table 12-2 Submeter Summary (required if 12-1 threshold exceeded)

Energy Use	Total Circuit Capacity	Submeter Provided?
Chillers/heat pump	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No
Package AC	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No
HVAC fan	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exhaust fan	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No
Makeup air fan	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No
Pump Systems	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No
Cooling Towers	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No
Boilers, furnaces, other heating	kW	<input type="checkbox"/> Yes <input type="checkbox"/> No
General Lighting	kVA	<input type="checkbox"/> Yes <input type="checkbox"/> No
Misc. Electric Loads	kVA	<input type="checkbox"/> Yes <input type="checkbox"/> No

Notes:

**CHAPTER 12
ENERGY METERING**

1201 General. All buildings shall comply with Chapter 12. Whole building energy supply sources shall be metered to supply energy consumption data to the building owner to effectively manage energy. The building shall have a totalizing meter for each energy source.

1202 Whole Building Energy Supply Metering. Meters with remote metering capability or automatic meter reading (AMR) capability shall be provided to collect energy use data for each energy supply source to the building including gas, electricity and district steam, that exceeds the thresholds listed in Table 12-1. Utility company service entrance/interval meters are allowed to be used provided that they are configured for automatic meter reading (AMR) capability.

Master submetering with remote metering capability (including current sensors or flow meters) shall be provided for the systems that exceed the thresholds in Table 12-1 to collect overall totalized energy use data for each subsystem in accordance with Table 12-2.

Metering shall be digital-type meters for the main meter. Current sensors or flow meters are allowed for submetering. For subsystems with multiple similar units, such as multicell cooling towers, only one meter is required for the subsystem. Existing buildings are allowed to reuse installed existing analog-type utility company service/interval meters.

1203 Metering: Where new or replacement systems or equipment is installed that exceeds the threshold in Table 12-1 or Table 12-2, metering shall be installed for that system or equipment in accordance with Section 1201.

**TABLE 12-1
ENERGY SOURCE METER THRESHOLDS**

Energy Source	Main Metering Threshold
Electrical service	> 500 kVA
On-site renewable electric power	> 10 kVA (peak)
Gas and steam service	> 300 kW (1,000,000 Btu/h)
Geothermal	> 300 kW (1,000,000 Btu/h) heating
On-site renewable thermal energy	> 10 kW (30,000 Btu/h)

**TABLE 12-2
COMPONENT ENERGY MASTER SUBMETERING THRESHOLDS**

Component	Submetering Threshold
Chillers/heat pump systems	> 70 kW (240,000 Btu/h) cooling capacity
Packaged AC unit systems	> 70 kW (240,000 Btu/h) cooling capacity
HVAC fan systems	> 15 kW (20 hp)
Exhaust fan systems	> 15 kW (20 hp)
Make-up air fan systems	> 15 kW (20 hp)
Pump systems	> 15 kW (20 hp)
Cooling towers systems	> 15 kW (20 hp)
Boilers, furnaces and other heating equipment systems	> 300 kW (1,000,000 Btu/h) heating capacity
General lighting circuits	> 15 kVA
Miscellaneous electric loads	> 15 kVA

Building Permit Plans Checklist

MTR-CHK

2009 Washington State Energy Code Compliance Forms for Nonresidential and Multifamily Residential

Revised August 2010

Project Address	Date
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The following information is necessary to check a building permit application for compliance with the building envelope requirements in the Washington State Nonresidential Energy Code.

Applicability (yes, no, n.a.)	Code Section	Component	Information Required	Location on Plans	Building Department Notes
REQUIREMENTS (Sections 1201-1203)					
	1201	Building Electric Meter	Indicate electric totalizing meter for building		
	1201	Renewables Meters	Indicate renewable generation totalizing meter		
	1201	Building Fuel Meters	If oil, gas, steam, or other fuel used, indicate totalizing meter		
	1202	Energy Service Capacity	Indicate building service capacity for each energy source		
	1202	Remote Metering	Indicate totalizing meter type for energy sources over Table 12-1 thresholds		
	1202	Sub-metering	Indicate capacities of each component system (table 12-2), if any energy source exceeds Table 12-1 submetering threshold		
	1202	Sub-metering	Indicate meters for each component system (table 12-2), if any energy source exceeds Table 12-1 submetering threshold		

If "no" is shown for any question, provide explanation: