



Commercial Mechanical Plan Review Checklist

Department of Consumer and Business Services

Building Codes Division • Pendleton Field Office

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INTRODUCTION

In general, a mechanical plan review is required for a commercial mechanical permit (OMSC 106.3.1). The information below will help BCD staff determine if your project may meet plan review exemption criteria.

STEP 1 PROJECT DETAILS

Mechanical permit no.:		Project name:	
Job site address:		Occupancy type:	
Contractor name:		CCB no.:	
Contractor phone no.:		Contractor email:	
Description of work:			

STEP 2 MECHANICAL PLAN REVIEW QUESTIONS

Please answer the following questions. Where any of the conditions below are met (i.e., “YES”), a mechanical plan review is required. BCD reserves the right to require mechanical plan review for other conditions. No list can cover all projects that may be encountered.

DOES THE PROJECT CONTAIN?	YES	NO
New construction		
Installation of a new appliance anywhere in the building		
Replacement of an existing appliance, and the Btu rating is more than 10 percent of the existing appliance		
Replacement of an existing appliance utilizing a different fuel type		
Installation will penetrate fire-rated construction		
New gas piping is installed.		
Alterations to existing piping that will increase overall Btu demand by more than 10 percent		
Installation of mini-split system		
Changing a ducted system to a ductless system		
Installing a new meter, changing meter pressure, installing a new regulator, or changing an existing regulator pressure.		
Installation in high-occupant space, such as a school or a place of public assembly		
Installation in a location with higher fire danger (e.g., wood shop, hemp processing, chemical storage, industrial)		
Replacement of rooftop HVAC unit where size and shape is not within 10 percent of the original unit (smaller/larger)		
Replacement of rooftop HVAC unit not installed in same location as previous unit		

STEP 3 STRUCTURAL PLAN REVIEW QUESTIONS

In accordance with [Oregon Statewide Interpretation 16-01](#), where any of the conditions below are met (i.e., “YES”), a structural (building) permit and plan review outlining compliance with Section 102.6.1 of the [OSSC](#) is applicable.

QUESTION	YES	NO
Is the weight of the new unit/equipment more than 10 percent over, or 100 pounds more than, the weight of the existing unit? (<i>Provide information below if answering “No”</i>)		
Total weight of existing HVAC equipment to be removed:		
Total weight of new/proposed HVAC equipment (including new units, economizers, etc.):		
Weight (pounds) difference:		
(Refer to back page for additional units) Percentage difference:		
Is any dimension of the new/proposed HVAC equipment (including new units, transition curbs, economizers, etc.) greater than 6 inches or more than 10 percent of the dimensions of the existing HVAC equipment (whichever is less) to be removed/replaced?		
Will the new unit/equipment mount to a new curb or require modification of an existing curb? Use of a curb adapter is considered a modification of the curb in reference to this question.		
Will the new unit/equipment be installed in a location that did not previously support equipment of comparable size and weight?		
Will the installation of the new HVAC equipment include modification or additions to structural elements, including re-framing of existing opening?		

NOTES

1. All work is to be done in accordance with the current editions of the Oregon Specialty Codes (e.g., mechanical, energy, structural, and electrical).
2. Mechanical and electrical permits are required, as applicable, and all plans and information shall be available at the job site for inspections.
3. All work shall remain uncovered and visible for inspection until approved.

STEP 4 ACKNOWLEDGEMENT

I, _____, certify the information provided on this form is true and reasonably defines the scope of work, and I acknowledge the requirements and limitations thereof. I understand that the inspector may require a structural plan review and permit if it is discovered that information presented on this form is incorrect during an inspection.

ADDITIONAL UNITS

NO.	UNIT DESCRIPTION	WEIGHT
#2		
	Unit to be replaced:	
	Weight difference (lbs.):	
	Percentage difference:	
#3		
	Unit to be replaced:	
	Weight difference (lbs.):	
	Percentage difference:	
#4		
	Unit to be replaced:	
	Weight difference (lbs.):	
	Percentage difference:	

MECHANICAL PLAN REVIEW

If a mechanical plan review is required for the following specifications, drawings and details should be provided as applicable to your project. This does not constitute a complete list. Please refer to the current adopted Oregon Mechanical Specialty Code (OMSC) for more information.

- Site and floor plans drawn to scale
- Engineering, if required, based on unit weight and location
- Roof layout: location of roof top units, setbacks from edges
- Venting, piping, and layout with location of units
- Ventilation calculations (include makeup air calculations for hoods, if applicable)
- Gas piping schematics: materials, installation, valve locations, size of meter, sizing criteria and calculations (i.e., the longest run of piping), the pressure, the pressure drop, and applicable gas pipe sizing table(s)
- Product cut sheets for any equipment and materials being installed, including listing, labeling, installation, and compliance with referenced material standards
- Details on the HVAC equipment, including the equipment capacity (Btu/h input), controls, equipment location, access, and clearances
- Details of all duct penetrations through fire-resistance-rated assemblies, including locations for all fire dampers, smoke dampers, and ceiling radiation dampers, along with applicable fire protection ratings and labeling requirements
- Duct construction and installation methods, flame spread/smoke development ratings of materials, flexible air duct and connector listing, sealing of duct joints, seams and connections, and duct support spacing.
- Condensate disposal, routing of piping and auxiliary and secondary drainage systems.
- Required exhaust systems, routing of ducts and termination to the exterior.
- Method of supplying combustion air to all fuel-fired appliances, the location and size of openings, and criteria used to size the openings
- Details on the vents used to vent the products of combustion from all fuel-burning appliances, including the type of venting system, the sizing criteria required for the type of vent, and the routing of the vent
- Boiler and water heater equipment and piping details, including safety controls, gauges, valves, and distribution piping layout
- Details on the type and quantity of refrigerant, calculations indicating the quantity of refrigerant piping material and the type of connections
- Complete details of all Type I and II kitchen hoods, grease duct construction and velocity, clearance to combustibles, and fire suppression system