



**COMMUNITY & DEVELOPMENT SERVICES**

840 Northgate Drive, Richland, WA 99352

Phone: 509-942-7794 Fax: 509-942-7764

**WORKSHEET FOR COMMERCIAL PLAN REVIEWS**

THIS WORKSHEET MUST BE SIGNED (AT END OF DOCUMENT) BY THE ARCHITECT OR ENGINEER OF RECORD FOR THE ENTIRE PROJECT (SEC. 106.3.4) FOR ALL COMMERCIAL OR MIXED-USE BUILDINGS OVER 4,000 S.F. TOTAL FLOOR AREA (ALL FLOORS AND ALL EXTERIOR COVERED AREAS COMBINED). BUILDINGS THAT ARE 4,000 S.F. OR LESS MUST STILL FILL OUT THIS WORKSHEET AND BE SIGNED BY THE OWNER OR APPLICANT.

**Note:** All code references are from the 2012 IBC, unless noted otherwise.

<b>ADDRESS OF PROJECT:</b>	
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<b>Basic Information</b>
Type of Construction (circle one) I-A I-B II-A II-B III-A III-B IV-HT V-A V-B
Total Proposed S.F. (all floor levels & all exterior covered areas combined)
Brief written description of the proposed use (s) of the building:

<b>Basic Occupancy Information</b>	
<b>301-312 OCCUPANCY CLASSIFICATION:</b> <small>(Designate the code classification, A-2, B, M, etc., under which you have designed your building. For mixed-uses, see Sec. 508 below)</small>	
<b>508.3 NON-SEPARATED USES</b>	YES NO
List all occupancy groups:	
Which occupancy group is considered the most restrictive in your proposal including Section 403 and Chapter 9 requirements?	
<b>508.4 SEPARATED USES</b>	YES NO
List all separations (in hours from Table 508.4) and their respective occupancy groups:	
<b>508.2 ACCESSORY OCCUPANCY</b>	YES NO
Please describe what the accessory use is and where it is in the bldg.	
(If you answer "yes" and you are claiming an incidental accessory use, please also make sure to fill out section 508.2 below on page 3 in order to determine what method you are using to qualify, i.e., the 10% rule, the separation rule, or the exemption for sprinklers).	

<b>Chapter 4 Information</b>
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DOES YOUR PROPOSED BUILDING USE ANY OF THE "SPECIAL" TYPES OF BUILDINGS or AREAS NOTED IN CHAPTER 4? Please answer YES or NO to <b>ALL</b> categories below.			
<b>402</b> Covered Mall Buildings		<b>403</b> High-Rise Buildings	
<b>404</b> Atriums		<b>405</b> Underground Buildings	
<b>406</b> Motor-vehicle-related occupancies		<b>407</b> Group I-2 occupancy	
<b>408</b> Group I-3 occupancy		<b>409</b> Motion Picture Projection Room	
<b>410</b> Stages or Platforms		<b>411</b> Special Amusement Building	
<b>412</b> Aircraft-related occupancy		<b>413</b> Combustible storage	
<b>414</b> Hazardous materials		<b>416</b> Application of flammable finishes in any area	
<b>417</b> Drying room in any portion of the building		<b>418</b> Organic coating manufacturing in any area of the building	
<b>415</b> H-1, H-2, H-3, H-4, and H-5 Occupancy: Indicate below which "H" occupancy, attach MSDS sheets for all such materials and attach additional explanations if needed.		YES	NO
<b>419</b> Any live/work units proposed in this building:		YES	NO
<b>420</b> Any I-1, R-1, R-2, or R-3 in the building: Describe the type of unit separation used (1-hr. fire barrier) and indicate below where the unit separations are located in the plan sheets		YES	NO
<b>421</b> Any Hydrogen Cutoff Rooms:		YES	NO
<b>422</b> Is this an "Ambulatory Health Care Facility"? Indicate below where in your plan sheets you show 422.2 smoke barriers, 422.3 refuge area, and 422.4 independent egress.		YES	NO

For any of the special uses listed above, please indicate below each particular section of the requirements and where on the plans the compliance with that section can be found. Please include SEPARATIONS from Sec. 420 here and list the plan sheet where the separations can be found.

Sub-section # from IBC (414.2, 422.2, etc.).	Sheet in drawings from where item is addressed	Explanation (or specifically how it is addressed in the drawing).



<b>507.5</b> Reduced open space allowed?	YES	NO	<b>507.8</b> Aircraft paint Hangar proposed?	YES	NO
<b>507.6</b> Group A-3 bldg.?	YES	NO	<b>507.9</b> Group E building?	YES	NO
<b>508.2.5</b> Incidental Accessory Occupancy				YES	NO
(If yes, describe below what your incidental accessory occupancy is, what you did to comply with Table 508.2.5 and where in the plans this is shown)					

<b>509 SPECIAL PROVISIONS (exceptions to allowable floor area and allowable heights/stories)</b>					
Does your building propose to use any of the special provisions of this section (primarily used for parking garages beneath multi-story apartments or multi-story, multi-use buildings, or horizontal separations)? Describe which sub-section applies to your building for Section 509 and where on the plans each compliance item is shown.				YES	NO
Sub-section # from IBC	Sheet in plans where this specifically is shown (separations, etc)?	Explanation of how you comply with this sub-section:			
509.1					
509.2					
509.3					
509.4					
509.5					
509.6					
509.7					
509.8					
509.9					

**Chapter 6 Information**

**Table 601** Indicate each of the building elements (columns, walls, roof, etc.) and where on the plans such fire-ratings are shown. If your proposed building is Type B (unrated), then **SKIP** to 602.

	Fire rating in hours	Describe construction(gyp board, spray on, etc.)	Sheet of plans
Columns			
Girders			
Trusses			
Exterior bearing walls			
Interior bearing walls			
Floor			
Roof			

**Table 602** Indicate all exterior wall's distance for fire separation (to property line or other fire separation distance) and area of openings in that wall as a % of the wall (per Table 704.8)

	Exterior Wall	Distance	Fire-rating required per Table 602	Area of openings as % of wall

North				
South				
East				
West				

**Table 603 Combustible Materials in Non-Combustible buildings:** Please describe here any combustible materials you are proposing if you are using Type I, Type II construction. There are many exceptions that often cause confusion, so please reference which exception you think you qualify for.


### Chapter 7 Information

**Tell what page of the plans** each of the fire walls, fire barriers, shafts, fire partitions, smoke partitions, or smoke barriers are on (include a brief description of why this firewall or fire barrier, etc., or shaft is required, i.e., "this firewall separates the B occupancy from the H occupancy building area").

Sheet of plans	Type of wall shown (fire wall, fire barrier, shaft enclosure, smoke partition, fire partition, smoke barrier, etc.)	Fire rating (in hours)
(Description of why it is fire rated)		
(Description of why it is fire rated)		

**705.11** Parapets are required unless you meet one of the exceptions. Please describe which exception you are using to avoid parapets (the most common thing is to avoid parapets).

Exception #	Describe how your building complies with exception:	Sheet of plans where this is shown

**713.1** Details of all fire penetrations are shown on sheet(s) \_\_\_\_\_ or specifications page \_\_\_\_, (need exact materials to be used for all conditions and all types of penetrations that will exist, including company, brand, and model #.)

**715** Fire doors are indicated on the door schedule on sheet \_\_\_\_\_, or are listed separately in specification book page \_\_\_\_\_.

**716** Mechanical plans sheet \_\_\_\_\_ shows all fire, smoke, or combination fire/smoke dampers?

### Chapter 8 Information

**Table 803.5** Are there any unusual interior finishes being proposed? If so, please describe:


<b>Chapter 9 Information</b>		
City of Richland has a special ordinance regarding fire sprinklers. Please indicate whether you have complied with this ordinance and whether fire sprinklers are required:		
Checked City ordinance and fire sprinklers required?	YES	NO
Checked City ordinance and fire alarms required?	YES	NO
If the building requires fire alarm or fire sprinkler, indicate the company and/or fire protection engineer who is designing these systems:		
Company Name & Address:		
Phone:	Fax:	Contact name:

Even though Chapter 5 and City requirements may have been met, Chapter 9 may require a fire sprinkler system anyway. Please list each occupancy of the building and its "Fire Area" per Chapter 9.

Occupancy group	Fire Area	Sprinklers Required?	
		YES	NO

<b>Chapter 10 Information</b>		
1003.2 Minimum ceiling height provided in egress system: _____ Height: _____		
1003.3.3.3 Projections into egress ways, such as trim, are in compliance: _____ Sheet of plans showing any projections: _____		
1003.4 Floor Surface of egress is of the following materials:		
1003.5 Changes in elevation in any egress way is shown on sheet _____ of plans		
1004 Occupant loads		
Describe each individual area	Occupant ratio assigned	Occupant load
		Occ. Load Total:
1005 Egress width, calculated per this section and based on total occupant load is:		
Stairway areas: _____ inches	Other egress areas: _____ inches	
1006 All egress areas have been illuminated per this section and are shown on sheet _____ of plans		
1007 Two items in this section are often missed: two handicap accessible entrances required and areas of refuge per 1007.6. Where are these items shown on the plans?		
1008 The most common problems with doors are the following:		

Landings provided at all doors	(indicate where on the plans this is shown)	
Lever hardware on all doors	(indicate where on the plans this is shown)	
Door hardware (shown on plan sheet #?)		
<b>1008.1.9.3</b> No locks or latches on any door allowed, with 4 exceptions. If you are using any of the exceptions shown, please describe. The most common exception is using "This Door to remain unlocked . . . " at the main entry".		
<b>1008.1.10</b> Panic hardware required by this section?      YES      NO      (If yes, describe which rooms/areas have panic hardware and where on the plans such hardware is specified?)		
Room/area:		
Room/area:		
<b>1009.4.2</b> Stairways, 7" max. riser height (4" min.) and 11" min. tread (7/11 rule); <b>1012.6</b> is often overlooked: Handrails shall extend 12" beyond the top riser and continue to slope for the depth of one tread (11") beyond the bottom riser. Handrail extensions are shown on sheet _____ of the plans.		
<b>1011</b> Exit signs are shown on sheet _____ of the plans.		
<b>1012.3.1</b> Handrails are now divided into Type I or Type II, which have you used? (what plan sheet are they shown on?)		
<b>1013</b> Guards (formerly called guardrails) are shown on sheet _____ of the plans.		
<b>1014</b> Do any of the conditions shown in this EXIT ACCESS section apply to your proposed building?		
<b>1014.2</b> Egress through intervening spaces	Used? YES      NO	Where on plans?
<b>1014.2.1</b> Multiple tenants	YES      NO	
<b>1014.2.2</b> Group I-2 (did you use suites?)	YES      NO	
<b>1014.3</b> Common path of egress travel	YES      NO	
<b>1015 &amp; 1019</b> How many exits are required based on occupant load: _____ total # of exits required by Table 1015.1, or by Table 1019.1 or Table 1019.2 (If you qualify for one exit, please describe below)		
(Explain qualifications for one exit)		
<b>1016</b> Exit travel distance for the worst case scenario is _____ feet, shown on sheet _____ of the plans.		
<b>1018</b> Corridors are required to be rated?	YES      NO	Where is this shown on plans?
<b>1022.1</b> Is vertical exit enclosure req'd @ stairways or other locations?	YES      NO	
<b>1022.1</b> Do any exceptions apply?	YES      NO	
<b>1023</b> Exit passageways were used?	YES      NO	
<b>1025</b> Horizontal exits were used?	YES      NO	
<b>1026</b> Are there any exterior exit stairways or exterior exit ramps?	YES      NO	
<b>1027.6</b> Do all exits provide an access to the public way?      YES      NO If no, then describe below which exception was used to satisfy the requirement.		

<b>1028</b> Does your proposal contain any areas or rooms for assembly occupancy? YES NO		
If yes, show where each item is on the plans:		
Section	Plans Sheet	
1028.2	Assembly main exit	
1028.3	Assembly other exits	
1028.4	Foyers and lobbies	
1028.5	Interior balcony & gallery/means of egress	
1028.6	Width for assembly	
1028.7	Travel distance	
1028.8	Common path of travel	
1028.9	Assembly aisles are required?	
1028.10	Clear width serving seating	
1028.11	Assembly aisle walking surfaces	
1028.12	Seat stability	
1028.13	Handrails	
1028.14	Assembly guards	
1028.15	Bench seating	
<b>1029</b>	Is Emergency Escape and Rescue required?	YES NO
Egress windows are shown on plan sheet _____		

<b>Chapter 11 Information</b>					
In the 2012 IBC, Washington state adopted the ANSI A117.1-2003 version for the handicap code. Are you aware of this code and its many new requirements?				YES	NO
Most common problems with the new ANSI standard are doors encroaching into toilet and sink clear floor areas, door maneuvering clearances (18" to the side of door, etc.), the new vertical grab bar, and often exterior accessibility not shown anywhere (this can be shown on the civil plans). Have you checked these types of items and shown on the plans?				YES	NO
Major elements of accessibility:					
Elevators required?	YES	NO	At least 2 entrances must be accessible, is this shown on plans?	YES	NO
Accessible parking totals (with at least one van accessible space) How many total did you provide?					
Exterior elements of accessibility shown on site and/or civil plans?				YES	NO

<b>Chapter 12 Information</b>	
<b>1210.1</b> Toilet room floors shall have smooth, hard, non-absorbent finish (concrete, tile, etc.) which extends upward onto the walls at least 5 inches. What material are you proposing?	
(describe)	
<b>1210.2</b> Walls within 2' of urinal/water closet shall have smooth, hard, nonabsorbent finish to a height of 4 feet. What material are you proposing?	
(describe)	

<b>Chapter 16 Information</b>	
<b>1607.1</b> Minimum uniform and concentrated live loads used for this design are: (yes, we know this is probably on the structural engineer's design calculations, but we want to make sure the architect knows what loads were used)	
Uniform: _____ Concentrated: _____	
<b>1601</b> All Richland structural design criteria have been met (2012 IBC): (indicate what criteria you or your structural engineer designed to)	
Seismic zone _____ Wind Speed _____ Wind Exposure _____	
(Note: All of the City of Richland, including in-town locations, are considered as being Wind Exposure C).	
Ground Snow Load _____ Frost depth: _____ (Note: All these must be shown in the structural calculations).	

<b>Chapter 29 Information</b>				
Washington state adopted most of Ch. 29 from the 2012 IBC, using the occupant load calculated from Ch. 10 as the basis for # of plumbing fixtures, but with some amendments (see online at www.sbcc.wa.gov). Please use that amended chapter and Table 29 (state amendments) of fixture counts to fill in the following information:				
Occupancy group area (Ch. 10)	Occupancy ratio to use (same Ch. 10)	Toilet count	Lavatory count	Drinking Fountain Req's.
Almost all commercial buildings require separate male and female restrooms. If you are claiming an exception to this as described in the 2012 IBC with State amendments, please describe how you comply with the exception: (Explanation)				

**Other minor items that must be shown on the plans:**

- 804-806 Flame spread for interior finishes, verify plans and/or specifications follow Table 8-B.
- 1203.2 Attic ventilation required at 1/300<sup>th</sup> attic area (or 1/150<sup>th</sup> for all upper venting).
- 1203.3 Crawl space ventilation required at 1/1500<sup>th</sup> the floor area (w/ vapor retarder on ground).
- 1209.1 Crawl access required 18"x24" minimum (larger if there is any mech. equip. in the crawl space).
- 1209.2 Attic access required 20"x30" minimum (larger if any mech. equip. in attic--see IMC).
- 1404.2 Weather-resistive barrier of 15 lb. building felt or approved "house-wrap" ("Tyvek" or equal) shall be applied over studs or sheathing on all exterior walls.
- 1405 Veneers, verify type of veneer being used and appropriate requirements.
- 1505.1 Table 1505.1, each construction type (II-B, etc.) must have roof class covering per this table. Roof covering must match Chapter 7 requirements for roof assembly.
- 1506 Roof drainage and overflow, verify overflows on plans.
- 1807.2 Damp-proofing required on basement walls
- 2406.4 **Safety glazing** at various locations, adjacent to doors, etc. (Please clearly show this on plans, not just in a window schedule).

**STRUCTURAL REMINDERS (Wood Construction)**

- 2304.3.2 Headers at all openings must be shown on a plan/schedule and sized for imposed loads.
- 2304.3.3 Shrinkage must be accounted for in buildings where the wood walls support more than 2 floors and a roof; structural analysis required.
- 2304.9.1 Standard nailing schedule, double-check to make sure there are notes or specifications that cover these items; **important item is roof sheathing nailed 8d @ 6" o.c.—in order to do this, you need solid blocking** (see Table 2304.9.1, item #31 and footnote b)
- 2304.11.2.1 Min. 18" clearance below all wood floor joists, min. 12" clearance below all floor girders.
- 2304.11.2.2 Min. 8" clearance from grade to mudsill plate.
- 2304.11.2.6 Pressure-treated posts required, or provide 8" high piers in crawl space.
- 2305.3.3 Design for shear walls (see 2308.2 below) must meet 3 1/2:1 ratio (height to width).
- 2308.2 Conventional light-frame construction can ONLY be used if ALL criteria here is met (e.g., if trusses are more than 40 feet, then fully engineered building required, etc.)

**OTHER CODES**

- IMC Verify furnace location requirements, service lighting, etc. (Sec. 304.5)
- 2012 UPC Check water supply piping sizes, drainage piping sizes, etc., based on fixture units for such.

**FOR R1 (hotels) and R2 (apartments) OCCUPANCIES, verify the following:**

- 304.5 UMC Fuel burning equipment cannot be located in a bedroom, bathroom, or closet, or in an enclosed space with access only thru such rooms; furnace requires 30" working space in front.
- 408.6 UPC Water closet area requires 30" minimum width, 24" clear space in front of toilet
- 1003.3.1.7 Landings at doors, not more than 8" drop to exterior landing.
- 310.4 Sleeping rooms, verify egress req's..
- 310.6.1 Ceiling height req's. for habitable rooms is 7'-6"; for kitchens, hallways, bathrooms, etc., 7'-0".
- 310.6.2 Minimum floor areas for rooms (Sec. 310.6.2 and 310.6.3)

**RCW64.55 MULTI-FAMILY DWELLINGS, SPECIAL INSPECTION OF WEATHERIZATION/ENCLOSURE**

**CERTIFICATION BY LICENSED DESIGN PROFESSIONAL (ARCHITECT OR ENGINEER)**

By signing here, I attest and affirm that I am the architect/engineer of record in accordance with Sec. 106.3.4 of the adopted IBC (design professional in responsible charge), and that I have reviewed and coordinated, or will review and coordinate, all submittal documents prepared by others, including phased and/or deferred submittal items, for compatibility with the design of the building. I will review and coordinate all required shop drawings and submit approved shop drawings to the City of Richland prior to the installation of the items in question. I further attest that this code worksheet has been filled out by me or under my direct supervision and represents a good faith effort to comply with all building code and building code-related requirements and that code and code-related requirements of this worksheet have been shown on the submitted construction plans.

\_\_\_\_\_  
Signature of architect/engineer of record

\_\_\_\_\_  
Date