



WORKSHEET FOR COMMERCIAL PLAN REVIEW

The project architect or engineer of record must sign this worksheet at the end of the document (*IBC Sec. 107.1*) for all commercial or mixed-use buildings over 4,000SF in total floor area (inclusive of all floors and exterior covered areas). Where buildings are 4,000SF or less, the owner or applicant must fill out and sign this worksheet.

GENERAL INFORMATION

Project Address	
Type of Construction	
Fire Protection System If provided, specify type (e.g. NFPA 13)	
Total Proposed S.F. (include all floors and exterior covered areas)	
Proposed Use (Provide written description)	

EXISTING BUILDINGS

Will the building remain operational during construction?	<input type="checkbox"/> YES or <input type="checkbox"/> NO
Are provisions for Safeguards During Construction provided? (Ch. 33)	<input type="checkbox"/> YES or <input type="checkbox"/> NO
Is the work in this building or space a change of occupancy/use?	<input type="checkbox"/> YES or <input type="checkbox"/> NO

OCCUPANCY CLASSIFICATION (Ch. 3) - check all that apply

Use and Occupancy	Total Area
<input type="checkbox"/> Assembly (303) <input type="checkbox"/> A-1 <input type="checkbox"/> A-2 <input type="checkbox"/> A-3 <input type="checkbox"/> A-4 <input type="checkbox"/> A-5	
<input type="checkbox"/> Business (304)	
<input type="checkbox"/> Education (305)	
<input type="checkbox"/> Factory (306) <input type="checkbox"/> F-1 <input type="checkbox"/> F-2	
<input type="checkbox"/> High Hazard (307) <input type="checkbox"/> H-1 <input type="checkbox"/> H-2 <input type="checkbox"/> H-3 <input type="checkbox"/> H-4 <input type="checkbox"/> H-5	
<input type="checkbox"/> Institutional (308) <input type="checkbox"/> I-1 <input type="checkbox"/> I-2 <input type="checkbox"/> I-3 <input type="checkbox"/> I-4	
I-3 Use Condition <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4	
<input type="checkbox"/> Mercantile (309)	
<input type="checkbox"/> Residential (310) <input type="checkbox"/> R-1 <input type="checkbox"/> R-2	
<input type="checkbox"/> Storage (311) <input type="checkbox"/> S-1 <input type="checkbox"/> S-2	
<input type="checkbox"/> Utility/Misc. (312)	

GENERAL BUILDING HEIGHTS AND AREAS (Ch. 5)

	Allowable	Proposed
Building Height (Table 504.3)		
Number of Stories (Table 504.4)		
Unadjusted Allowable Area Factor (Table 506.2)		
Frontage Increase (506.3)	Area factor increase, $I_f =$ _____	
<input type="checkbox"/> Single-occupancy, One-story <input type="checkbox"/> Mixed-Occupancy, One-story <input type="checkbox"/> Single-occupancy, Multistory <input type="checkbox"/> Mixed-Occupancy, Multistory	Allowable Area (Show Eq. 5-1, 5-2, or 5-3)	
Proposed Building Area		
Basement area		
Main level area		
Main level outdoor covered areas		
2 ND floor level area		
2 ND floor level outdoor covered areas		
3 RD floor level area		
3 RD floor level outdoor covered areas		
4 TH floor level area		
4 TH floor level outdoor covered areas		
Additional floors area		
Additional floors covered areas		
Mezzanines and Equipment Platforms		
Are mezzanines or equipment platforms proposed?	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Describe:		
Unlimited Area Buildings		
Are you proposing an unlimited area building?	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
<input type="checkbox"/> Non-sprinklered, One-Story Building (507.3) <input type="checkbox"/> Sprinklered, One-Story Building (507.4) <input type="checkbox"/> Two-Story Building (507.5) <input type="checkbox"/> Group A-3 of Type II, III, or IV Const. (507.6-7) <input type="checkbox"/> Group H Occupancies (507.8-9) <input type="checkbox"/> Group E Buildings (507.11) <input type="checkbox"/> Motion Picture Theaters (507.12) <input type="checkbox"/> Mall and Anchor Buildings (507.13)	Describe:	

Note: Many designs do not include outdoor covered areas within the floor area. Per the definitions in Ch. 2, floor area includes all areas “within the horizontal projection of the roof or floor above.” The City of Richland does not count standard roof overhangs, but will include drive-thru covered areas, covered porches, and similar covered areas when determining building area.

MIXED USE AND OCCUPANCY (508)

Accessory Occupancies (508.2)

The aggregate area of accessory occupancies shall not occupy more than 10 percent of the floor area of the story in which they are located and shall not exceed the tabular values for non-sprinklered buildings in *Table 506.2* for each such accessory occupancy.

Non-Separated Mixed Use Occupancies (508.3)

The allowable building area and height of the building or portion thereof shall be based on the most restrictive allowances for the occupancy groups under consideration.

Separated Mixed Use Occupancies (508.4)

Each portion of the building shall be individually classified as to use and shall be separated from adjacent uses by fire barriers and/or horizontal assemblies having a fire-resistance rating determined in accordance with *Table 508.4*. In each story, the building area shall be such that the sum of the ratios of the actual building area of each separated occupancy divided by the allowable building area of each separated occupancy shall not exceed 1.

INCIDENTAL USES AND SPECIAL PROVISIONS (509-510)

<p>Incidental Use (509) Does the proposed project include any of the incidental uses provided within <i>Table 509</i>? If yes, describe below and specify provided separation and/or protection.</p>	<p><input type="checkbox"/> YES or <input type="checkbox"/> NO</p>
<p>Description:</p>	
<p>Special Provisions (510) Does the proposed project include any of the incidental uses provided within <i>Section 510</i>? If yes, describe below.</p>	<p><input type="checkbox"/> YES or <input type="checkbox"/> NO</p>
<p>Description:</p>	

SPECIAL DETAILED REQUIREMENTS BASED ON USE AND OCCUPANCY (Ch. 4)

Does your proposed building use any of the "special" types of buildings or areas noted in chapter 4? Check any that apply.

<input type="checkbox"/> Mall Buildings (402)	<input type="checkbox"/> High-Rise Buildings (403)	<input type="checkbox"/> Atriums (404)
<input type="checkbox"/> Underground Buildings (405)	<input type="checkbox"/> Motor-vehicle Related (406)	<input type="checkbox"/> Group I-2 (407)
<input type="checkbox"/> Group I-3 (408)	<input type="checkbox"/> Motion Picture Projection (409)	<input type="checkbox"/> Stages and Platforms (410)
<input type="checkbox"/> Special Amusement (411)	<input type="checkbox"/> Aircraft Related (412)	<input type="checkbox"/> Combustible Storage (413)
<input type="checkbox"/> Hazardous Materials (414)	<input type="checkbox"/> Group H Occupancies (415)	<input type="checkbox"/> Flammable Finishes (416)
<input type="checkbox"/> Drying Rooms (417)	<input type="checkbox"/> Organic Coatings (418)	<input type="checkbox"/> Live/Work Units (419)
<input type="checkbox"/> Group I-1 & R Occupancies (420)	<input type="checkbox"/> Hydrogen Fuel Gas Rooms (421)	<input type="checkbox"/> Ambulatory Care Facilities (422)
<p>NOTE: For any of the special uses listed above, please indicate below each particular "special" use, the specific requirements, and where on the plans the compliance with that section can be found.</p>		
<p>Explanation:</p>		
<p>Electric Vehicle Charging Infrastructure (427) For new buildings serving Group B, Group R-1 hotel and motel only, and Group R-2 occupancies.</p>	<p>Required <input type="checkbox"/> YES or <input type="checkbox"/> NO</p>	<p>Sheet</p>

TYPE OF CONSTRUCTION (Ch. 6)

Fire-Resistance Rating for Building Elements (Table 601)				
		Required Rating	IBC, UL, or GA Assembly No.	
Primary Structural Frame				
Exterior Bearing Walls				
Interior Bearing Walls				
Floor Construction				
Roof Construction				
Fire-Resistance Rating of Exterior Walls and Openings Based on FSD (Table 602 and Table 705.8)				
	Fire Separation Distance	Req'd Rating per Table 602	Area of Openings as % of Wall	Degree of Opening Protection
North Side				
South Side				
East Side				
West Side				

FIRE AND SMOKE PROTECTION FEATURES (Ch. 7)

Fire and Smoke Resistant Construction Features		
Provide summary of fire and smoke resistance rated construction features such as fire walls, fire barriers, fire partitions, smoke barriers, smoke partitions, shaft enclosures, etc.		
Item:	Required Rating	IBC, UL, or GA Assembly No.
Penetrations, Fire-Resistant Joint Systems, and Opening Protectives (714-716)		
Specify sheet where details demonstrating the installation/application of fire-stopping are provided. Exact materials including manufacturer and listing number shall be provided.		Sheet _____
Specify sheet where door and opening schedules are provided.		Sheet _____
Specify mechanical sheet(s) showing fire/smoke dampers.		Sheet _____

INTERIOR FINISHES (Ch. 8)

Interior Wall and Ceiling Finish Requirements (Table 803.11)	
Are there any unusual interior finishes being proposed? If so, please describe below.	<input type="checkbox"/> YES or <input type="checkbox"/> NO
Description:	

FIRE PROTECTION SYSTEMS (Ch. 9)

Richland Municipal Code (RMC) Chapter 20.05 (hyperlink) The City of Richland has adopted via the municipal code additional provisions regarding fire protection systems. Please indicate that you have reviewed and complied with RMC Chapter 20.05.		
Fire Alarms Req'd	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Fire Sprinklers Req'd	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
If the building requires fire alarm or fire sprinkler, indicate the company and/or fire protection engineer who is designing these systems:		
List Company Name, Address, Contact, and Phone #		
Fire Protection Systems per IBC/IFC (903) Even though Chapter 5 and City requirements may have been met, Chapter 9 may require a fire sprinkler system anyway. Please list each occupancy within the building and its "Fire Area" per Chapter 9.		
Occupancy Group	Fire Area	Sprinklers Req'd?
		<input type="checkbox"/> YES or <input type="checkbox"/> NO
		<input type="checkbox"/> YES or <input type="checkbox"/> NO
		<input type="checkbox"/> YES or <input type="checkbox"/> NO
		<input type="checkbox"/> YES or <input type="checkbox"/> NO

MEANS OF EGRESS (Ch. 10)

General Means of Egress (1003)		
Specify minimum ceiling height provided along means of egress (1003.2)		
Specify sheet showing protruding objects on circulation paths (1003.3)		
Specify sheet showing slip-resistant surface along means of egress (1003.4)		
Specify detail sheet with for changes in elevation (1003.5)		
Occupant Loads (1004)		
Room Number or Area	Occupant Load Factor (Table 1004.1.2)	Occupant Load
		TOTAL

MEANS OF EGRESS (Ch. 10) - continued

Means of Egress Sizing (1005)		
The minimum egress width, calculated per this section and based on total occupant load is:	Stairways	Other Components
Number of Exits and Exit Access Doorways (1006)		
Based upon use and occupant load, how many exits are required:		
Maximum Common Path of Egress (1006.2.1)	Allowed	Proposed
Means of Egress Illumination (1008)		
Specify sheet showing means of egress illumination or note exception:		
Accessible Means of Egress (1009)		
Accessible means of egress within the building is shown upon sheet:		
Accessible means of egress to public way is shown upon sheet:		
Doors, Gates, and Turnstiles (1010)		
Landings at all exterior doors are shown upon sheet:		
Door hardware providing accessible use is indicated upon sheet:		
Panic and Fire Exit Hardware (1010.1.10)		
Is panic hardware required?	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Room or area that requires panic hardware:		
Stairways (1011)		
Specify sheet with stairway construction details:		
NOTE: 4"-7" riser and 11" minimum tread required.		
Specify sheet with handrail construction details:		
NOTE: Handrails shall extend 12" beyond top riser and one tread beyond the bottom riser.		
Exit Signs (1013)		
Specify sheet wherein exit signs are shown:		
Exit Access and Maximum Travel Distance (1016-1017, 1020) Please specify if any of the following apply and the sheet where shown:		
	Applies?	Sheet
Egress through intervening spaces (1016.2)	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Multiple tenants (1016.2.1)	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Group I-2 Suites (407.4)	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Maximum Exit Access Travel Distance (Table 1017.2)	Allowed	Proposed
Corridor Fire-Resistance Rating (Table 1020.1)	Fire-Resistance	Sheet

MEANS OF EGRESS (Ch. 10) - continued

Exits and Exit Components (1022-1028)		
	Applies?	Sheet
Interior Exit Stairways and Ramps (1023)	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Exit Passageways (1024)	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Horizontal Exit (1022)	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Exterior Exit Stairways and Ramps (1027)	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Do all exits provide access to a public way? (1028.5)	<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Assembly (1029)		
Does the project contain areas or rooms for assembly occupancy? If yes, please identify location of the following within the plan set.		<input type="checkbox"/> YES or <input type="checkbox"/> NO
Component	Requirement	Sheet
Main Exit (1029.2)	If OL>300, exit sized for ½ if the total OL	
Other Exits (1029.3)	If OL>300, exit sized for ½ if the levels OL	
Travel Distance (1029.7)	Maximum travel of 200-ft (250-ft if sprinkled)	
Emergency Escape and Rescue (1030)		
Are emergency escape and rescue openings required?		<input type="checkbox"/> YES or <input type="checkbox"/> NO

ACCESSIBILITY (Ch. 11)

Accessible Routes and Entrances (1104-1105)		
	Provided?	Sheet
Route from Site Arrival Points (1104.1)		
Route Within a Site (1104.2)		
Multistory Buildings and Facilities (1104.4)		
Accessible Entrances (1105)		
Parking and Passenger Loading Facilities (1106)		
Are accessible parking spaces with at least one van space provided?	Quantity Provided	Sheet

INTERIOR ENVIRONMENT and PLUMBING SYSTEMS (Ch. 12 and Ch. 29)

Toilet and Bathroom Requirements (1210)			
Wall and partition finish must be smooth, hard, and non-absorbent. GWB is not approved. (1210.2)		<input type="checkbox"/> YES or <input type="checkbox"/> NO	
			Sheet
Minimum Plumbing Facilities (2902)			
Occupancy Group	Occupant Load	# of Toilets Req'd	Lavatories Req'd
Please indicate if:		Provided?	Exception?
Separate facilities for each sex (2902.2)		<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Employee and public facilities (2902.3)		<input type="checkbox"/> YES or <input type="checkbox"/> NO	
Facilities within 500 feet (2902.3.2)		<input type="checkbox"/> YES or <input type="checkbox"/> NO	

STRUCTURAL DESIGN and SPECIAL INSPECTION (Ch. 16 and Ch. 17)

Construction Documents (1603)		
Are structural engineering calculations provided? (1603.1)		<input type="checkbox"/> YES or <input type="checkbox"/> NO
Has a geotechnical report been prepared and reviewed by both the structural and architectural designer? (1603.1.6 and 1803.2)		<input type="checkbox"/> YES or <input type="checkbox"/> NO
General Design Requirements (1604)		
Given the nature of occupancy, what is the appropriate risk category?		
Live Loads (1607)		
Given the occupancy and use, what live loads have been used? (Table 1607.1)	Occupancy or Use	Uniform Live Load
Special Inspection (Ch. 17)		
		Provided?
		Sheet
Has a statement of special inspections been prepared per IBC Sec. 1704.3? (1704.2.3)		<input type="checkbox"/> YES or <input type="checkbox"/> NO
Are structural observations required? (1704.6)		<input type="checkbox"/> YES or <input type="checkbox"/> NO

Other minor items that must be shown on the plans:

- 804-806 Flame spread for interior finishes, verify plans and/or specifications follow Table 803.11.
- 1203.2 Attic ventilation required at 1/300th attic area (or 1/150th for all upper venting).
- 1203.4 Crawl space ventilation required at 1/1500th the floor area (w/ Class 1 vapor retarder).
- 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).
- 1404.2 Water-resistive barrier of No. 15 asphalt 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 Each construction type (II-B, etc.) must have roof class covering per Table 1505.1.
- 1503.4 Roof drainage and overflow, verify overflows on plans.
- 1805 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.
- 2304.10.1 Standard nailing schedule; notes or specifications that cover these items required.
- 2304.12.1.1 Min. 18" clearance below all wood floor joists, min. 12" clearance below all floor girders.
- 2304.12.1.2 Min. 8" clearance from grade to mudsill plate.
- 2304.12.2.2 Pressure-treated posts required, or provide 8" high piers in crawl space.
- 2308.2 Conventional light-frame construction can ONLY be used if ALL criteria is met (e.g., max 40-ft truss span b/w bearing points, 25-ft brace wall line spacing).

WA STATE ENERGY CODE (Commercial)

- C404.2 Min. performance of water heating equipment
- C406 Buildings shall comply with no less than two of the additional efficiency package options
- R406 Residential buildings including apartments and other congregate living facilities shall comply with the residential additional energy efficiency requirements
- C408 Comply with the system commissioning requirements

OTHER CODES

- IMC Verify furnace location requirements, service lighting, etc.
- 2015 UPC Check water supply piping sizes, drainage piping sizes, etc., based on fixture units for such.

FOR MULTI-UNIT RESIDENTIAL BUILDINGS

- RCW 64.55 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. 107.3.4 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