

CLASSIFICATION OF A WAREHOUSE AS A F3 OCCUPANCY

Whether or not a warehouse type building can be considered a low-hazard industrial occupancy is determined by the amount of combustible content that it contains. This combustible content includes actual building construction materials within the building shell, as well as the combustible material stored or contained in the building. A *low-hazard industrial occupancy* (Group F, Division 3) is defined by the *National Building Code* (NBC) as an *industrial occupancy* in which the *combustible* content is not more than 50 kg/m² or 1,200 MJ/m² of *floor area*. A *medium-hazard industrial occupancy* (Group F, Division 2) is defined by the NBC as an *industrial occupancy* in which the *combustible* content is more than 50 kg/m² or 1,200 MJ/m² of *floor area* and not classified as a *high-hazard industrial occupancy*. The NBC defines *floor area* as the space on any *storey* of a *building* between exterior walls and required *firewalls*, including the space occupied by interior walls and *partitions*, but not including *exits*, *vertical service spaces*, and their enclosing assemblies.

The Building Standards Division considers all warehouse or storage type buildings to be medium-hazard industrial (F2) occupancies. If a designer, owner or occupant wishes to have a building considered to be a low-hazard industrial (F3) occupancy, **the following information must be submitted with the building permit application:**

1. Report from a Design Professional

The owner of the proposed building or occupancy must retain the services of an architect or engineer licensed to practice in the province of Saskatchewan. This design professional must perform an assessment of the proposed combustible content per square metre of building floor area and compare this combustible content to the maximum 50 kg/m² or 1200 MJ/m² permitted for a low hazard industrial occupancy.

Combustible content includes but is not limited to the following:

- Material to be stored
- Combustible liquids
- Pallets, racking, shelving, furniture, etc.
- Combustible partitions whose exposed construction has a flame spread rating of more than 25
- Combustible floor assemblies such as mezzanines or raised floors

Example of a Combustible Content Analysis:

Item	Unit	Measurement	QTY	Total
Wood stair	200	lbs	1	200
Interior Wood studs	4	lbs/lin.ft.	300	1200
Guardrail & Handrail	10	lbs/sq.ft.	50	500
Wood Doors	50	lbs	20	1000
Millwork	200	lbs	1	200
Floor Joists & sheeting	4	lbs/sq.ft.	800	3200
Office paper products	100	lbs/desk	20	2000
Furniture - tables	100	lbs	2	200
Furniture - chairs	20	lbs	40	800
Furniture - desks	150	lbs	20	3000
Storage	20000	lbs	1	20000
Total Weight				32300 lbs
				14651 Kg
Total Building Area				800 m ²
Total Wt/Area				18.31379 Kg/m ²

The above report submitted by the design professional must be signed and sealed.

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2. Letter from the Owner

The owner of the proposed building or occupancy must certify that the assumptions used in the report prepared by the design professional are accurate and that the combustible content will not exceed 50 kg/m² or 1200 MJ/m². A letter similar to the one below must be submitted along with the report from the design professional. Please note that the owner(s) are responsible for their building being used or occupied in accordance with the *Uniform Building and Accessibility Standards Act*.

Please note that if the above items are not completed, then the building occupancy will be considered as a Medium Hazard (F2) Industrial Occupancy.

To: The Building Official _____
Community Services Department – Building Standards _____ Date _____
City of Saskatoon
222 – 3rd Avenue North
Saskatoon, Saskatchewan S7K 0J5

Re: Name of Project _____
Address of Project _____
Proposed Use of Building _____

I (we) the owner(s) of the above referenced building concur with the assumptions used in the attached report submitted by _____. (Other assumptions may be stated here.)
Name of Design Professional

I (we) also certify that the combustible content of the building will not exceed 50 kg/m² or 1,200 MJ/m² of floor area. I (we) understand that if these limits are to be exceeded then an application must be made for a building permit to change the occupancy of this building from a low hazard industrial (F3) occupancy to a medium hazard industrial (F2) occupancy and that building upgrades may be required as a result of this change of occupancy.

Name(s) of Owner(s)

Signature of Owner(s)