Commercial Building Permits

CLASSIFICATION OF A WAREHOUSE AS AN F3 OCCUPANCY

(Rev: October 4, 2017)

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/m$^2$ or 1,200 MJ/m$^2$ 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/m$^2$ or 1,200 MJ/m$^2$ 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 Branch 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 meter of building floor area and compare this combustible content to the maximum 50 kg/m$^2$ or 1200 MJ/m$^2$ 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:**

<table>
<thead>
<tr>
<th>Item</th>
<th>Unit Measurement</th>
<th>QTY</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wood stair</td>
<td>200 lbs</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Interior Wood studs</td>
<td>4 lbs/lin ft.</td>
<td>300</td>
<td>1200</td>
</tr>
<tr>
<td>Guardrail &amp; Handrail</td>
<td>10 lbs/sq ft.</td>
<td>50</td>
<td>500</td>
</tr>
<tr>
<td>Wood Doors</td>
<td>50 lbs</td>
<td>20</td>
<td>1000</td>
</tr>
<tr>
<td>Millwork</td>
<td>200 lbs</td>
<td>1</td>
<td>200</td>
</tr>
<tr>
<td>Floor Joists &amp; sheeting</td>
<td>4 lbs/sq ft.</td>
<td>800</td>
<td>3200</td>
</tr>
<tr>
<td>Office paper products</td>
<td>100 lbs/desk</td>
<td>29</td>
<td>2000</td>
</tr>
<tr>
<td>Furniture - tables</td>
<td>100 lbs</td>
<td>2</td>
<td>200</td>
</tr>
<tr>
<td>Furniture - chairs</td>
<td>20 lbs</td>
<td>40</td>
<td>800</td>
</tr>
<tr>
<td>Furniture - desks</td>
<td>150 lbs</td>
<td>20</td>
<td>3000</td>
</tr>
<tr>
<td>Storage</td>
<td>20000 lbs</td>
<td>1</td>
<td>20000</td>
</tr>
</tbody>
</table>

   Total Weight: 33200 lbs = 14661 Kg
   Total Building Area: 800 m$^2$
   Total Wh/A: 18.3137 Kg/m$^2$

   The above report submitted by the design professional must be signed and sealed.
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/m$^2$ or 1200 MJ/m$^2$. 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.

This information has been adapted, with permission, from documentation provided by the City of Saskatoon.

To: The Building Official

Development Services – Building Standards Branch

City of Regina

2476 Victoria Avenue

Regina, Saskatchewan S4P 3C8

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/m$^2$ or 1,200 MJ/m$^2$ 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)