

Development Services

From Concept to Construction

Phone: 503-823-7300 Email: bds@portlandoregon.gov 1900 SW 4th Ave, Portland, OR 97201

More Contact Info (<http://www.portlandoregon.gov/bds/article/519984>)



APPEAL SUMMARY

Status: Hold for Additional Information

Appeal ID: 15937	Project Address: 737 SE Sandy Blvd
Hearing Date: 10/11/17	Appellant Name: Kevin Grant
Case No.: B-005	Appellant Phone: 503.444.2211
Appeal Type: Building	Plans Examiner/Inspector: Gail Knoll
Project Type: commercial	Stories: 2 Occupancy: F-2 Construction Type: III-B
Building/Business Name: Back Pedal Brewing	Fire Sprinklers: No
Appeal Involves: occ Change from H-2 to F-2	LUR or Permit Application No.: 17-205944-CO
Plan Submitted Option: pdf [File 1]	Proposed use: Brewery

APPEAL INFORMATION SHEET

Appeal item 1

Code Section 307.4 & 414

Requires Where milling / grinding of grain is proposed, H-2 occupancy is assumed without a 3rd party report sufficiently detailed to show H occupancy is not applicable. A building code appeal is required to evaluate the submitted 3rd party report.

Proposed Design The following describes the onsite grain storage, movement, and processing of grain within the brewery. This is prepared in an effort to provide the necessary content of a report as required per OSSC 414.1.3. This report is prepared by C2K architecture and the information within it has been provided and verified by the owner.

Onsite grain storage will consist of all 50lb. sealed grain bags. Grain will be provided by Country Malt Group and stored in the Mill Room, and on pallets directly adjacent to Mill Room. Grain quantities to be stored onsite will be a maximum of (50) 50lb. grain bags, and on average will be (30-35) 50lb. bags stored. There are no spark-producing equipment items located in the areas of the grain storage or between the Mill Room and grain storage area. The grain storage area on the first level, shown on the attached floor plan, will be fully ventilated. Sealed grain bags will be hand-carried individually from either area where stored, directly to the enclosed Mill Room where it is emptied into the lidded roller mill hopper. The un-ground grain going into the hopper does not contain combustible dust of any significant amount. Upon being emptied into the Mill Hopper within the Mill Room, the grain is then ground and gravity fed via the closed chain disk system and fed into the Mash Kettle. Empty grain bags will be disposed of or recycled after use via the exterior trash enclosure. The Roller Mill and Auger provide a closed system from the point of feeding grain into the lidded hopper atop the mill, to the point of dropping into the Mash Kettle, and will contain industry standard magnet installation to remove any potential foreign metal. See attached product cutsheet for the RAD Roller Mill Model 200 unit.

Mitigation within the Mill Room consists of providing dust tight housing, UL listed explosion proof Class 2, Division 1 rated equipment and lighting. The Roller Mill will contain a UL Rated explosion proof motor, and the Auger will have a motor located remotely, outside of the Mill Room and grain handling areas. A dust collection system is not proposed for this project, but it is understood that the Fire Marshal, upon inspection, may require a dust collection system, or an H-occupancy in the future if it is deemed necessary. The Mill Room will be vacuum cleaned of any dust, using a UL Listed vacuum, on a daily basis and wet mopped and thoroughly cleaned on a weekly basis per Back Pedal Brewing standard practices.

Reason for alternative The described mitigation and operational processes allows for the brewery and associated functionality to fall outside of the code definition of a high hazard H-2 occupancy. The nature of the materials and processes performed limit any dust producing to a quantity well below the levels of a hazardous environment. Grist milling produces particle sizes in the 889-1651 micron range and is not a direct producer of significant quantities of combustible dust. Any dust particle incidentally generated by the milling operation are confined within the very small compartment of the dust proof mill and are immediately transported via a closed system screw conveyor to a kettle of water at the beginning of the brewing process. The proposed milling does not manufacture, process, generate or store combustible dust as it is defined by the code, therefore it does not warrant a H-2 occupancy classification.

APPEAL DECISION

Exemption from High Hazard occupancy classification in grist milling system: Hold for additional information.

Appellant may contact John Butler (503-823-7339) with questions.

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Date: September 12, 2017

To: **City of Portland, Oregon – Bureau of Development Services**
1900 SW 4th Ave,
Portland, Or 97201

BDS LIFE SAFETY PLANS EXAMINER - Gail Knoll

From: Kevin Grant

Project: Back Pedal Brewing – 737 SE Sandy Blvd.

Application Number: 17-205944-000-00-CO

Subject: Building Code Appeal - Narrative of Use and Brewing Process

Project Information

The proposed project is for a brewery and tasting room. The **current building is permitted as an automotive repair facility (F-2).** The proposed project would turn the lower level into a brewery and the second level into a tasting room and lab. The following information is the proposed area and use for the existing building:

Lower Level: 5,330 sf

Upper Level: 1,984 sf

Total Area: 7,314 sf

Affected Area First Floor: **135 sf**

Occupancy of Affected Area: **H-2 as defined by code (Proposed F-2)**

Construction Type: **III-B**

Based on the proposed use, the **brewery will have a 135 square foot mill room on the lower level** where grain will be placed into an enclosed mill, where it is then cracked and transported to the mash turn through an enclosed automated auger. The current code states that any substance generating dust that could be determined to be combustible shall be categorized as hazardous and therefore labeled as an 'H' occupancy. This **memo is submitted in an effort to establish that based on the intent and process of the proposed use, it does not warrant a H-2 occupancy classification.**

Relevant Code Sections:Oregon Fire Code - Chapter 2 Definitions

COMBUSTIBLE DUST: Finely divided solid material, which is 420 microns or less in diameter and which, when dispersed in air in the proper proportions, could be ignited by a flame, spark or other source of ignition. Combustible dust will pass through a US No. 40 standard sieve.

Oregon Fire Code - Chapter 22 Combustible Dust-Producing Operations**OFC 2203.1**

Sources of ignition - Smoking or the use of heating or other devices employing an open flame, or the use of spark-producing equipment is prohibited where combustible dust is generated, stored, manufactured, processed or handled.

OFC 2203.2

Housekeeping - Accumulation of combustible dust shall be kept to a minimum in the interior of buildings. Accumulated combustible dust shall be collected by vacuum cleaning or other means that will not place combustible dust into suspension in air. Forced air or similar methods shall be used to remove dust from surfaces.

OFC 2204.1

The fire code official is authorized to enforce explosion protection in accordance with NFPA 61, 69, and 654 to prevent and control dust explosions.

OFC 2205

Dust collection. Dust collection systems shall be designed and installed in accordance with Section 540 of the International Mechanical Code. Electric ventilation fan motors shall be interlocked in accordance with Section 503.1 of the IMC

- **The grain milling process is identified under the Technical and Operational Information within this report.**

2014 Oregon Structural Specialty Code**OSSC 307.1.1 Hazardous Materials**

...The use of a building or structure, or portion thereof, that involves the manufacturing, processing, generation, or storage of materials that constitute a physical or health hazard in quantities in excess of those allowed in control areas complying with Section 414, based on maximum allowable quantities (MAQ) limits for control areas set forth in Tables 307.1 (1) and 307.1 (2).

OSSC Table 307.1 (1) MAQ per control area of Combustible Dust per Footnote q:

Where manufactured, generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based upon information prepared in accordance with Section 414.1.3

- **The allowable quantities of combustible material (MAQ) are established within this report.**

OSSC 307.1.1 Hazardous Materials

Hazardous materials in any quantity shall conform to the requirements of this code including section 414, and the Fire Code.

OSSC 307.4 High Hazard Group H-2

Buildings and structures containing materials that pose a deflagration hazard or a hazard from accelerated burning shall be classified as Group H-2. Such material shall include but not be limited to the following:

...Combustible dusts where manufactured generated or used in such a manner that the concentration and conditions create a fire or explosion hazard based on information prepared in accordance with Section 414.1.3

- **This report is compiled to show that the proposed use does not fit within this description**

OSSC 414.1.3 Hazardous Materials – Information Required

A report shall be submitted to the building official identifying the maximum expected quantities of hazardous materials to be stored, used in a closed system and used in an open system, and subdivided to separately address hazardous material classification categories based on Tables 307.1 (1) and 307.1 (2)

- **This report was compiled in an effort to meet this requirement**

Proposed Design

Back Pedal Brewing is proposing to install a Roller Mill and Automated auger system to process and feed grain directly from an enclosed Mill Room of approximately 135 square feet in size. See attached Floor Plan showing Grain Storage Area, Mill Room, Grist Mill, and Auger layout feeding directly from the Mill to the Brewhouse Mash Kettle.

Technical and Operational information

The following describes the onsite grain storage, movement, and processing of grain within the brewery. This is prepared in an effort to provide the necessary content of a report as required per OSSC 414.1.3. This report is prepared by C2K architecture and the information within it has been provided and verified by the owner.

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Reason for the Alternate:

The described mitigation and operational processes allows for the brewery and associated functionality to fall outside of the code definition of a high hazard H-2 occupancy. The nature of the materials and processes performed limit any dust producing to a quantity well below the levels of a hazardous environment. Grist milling produces particle sizes in the 889-1651 micron range and is not a direct producer of significant quantities of combustible dust. Any dust particle incidentally generated by the milling operation are confined within the very small compartment of the dust proof mill and are immediately transported via a closed system screw conveyor to a kettle of water at the beginning of the brewing process. The proposed milling does not manufacture, process, generate or store combustible dust as it is defined by the code, therefore it does not warrant a H-2 occupancy classification.

BREWGROUP

BACK PEDAL BREWING

737 SE SANDY BLVD
PORTLAND, OREGON
97214

PROJECT NO.: 16214
DRAWN: MAB
DATE: 17 JULY 2017
PERMIT ISSUE
REVISION: DESCRIPTION:
1 09/01/17 ADDENDA 1

REPRODUCTION OF THIS DRAWING IS EXPRESSLY FORBIDDEN WITHOUT THE SPECIFIC WRITTEN PERMISSION OF C2K ARCHITECTURE INC. THIS DRAWING IS ONLY CONDITIONALLY FILED, AND NEITHER REPLY OR FORFEITURE THEREOF CONSTITUTES AN ADOPTION OR ENDORSEMENT BY THE CITY OF PORTLAND. THE CITY OF PORTLAND DOES NOT GUARANTEE THE ACCURACY OF THIS DRAWING OR ANY INFORMATION, REPRESENTATION OR OPINION THEREON, AND ANY PARTY TO REPRODUCE THIS DRAWING OR ANY THEREOF WITHOUT THE WRITTEN AUTHORIZATION OF C2K ARCHITECTURE INC.

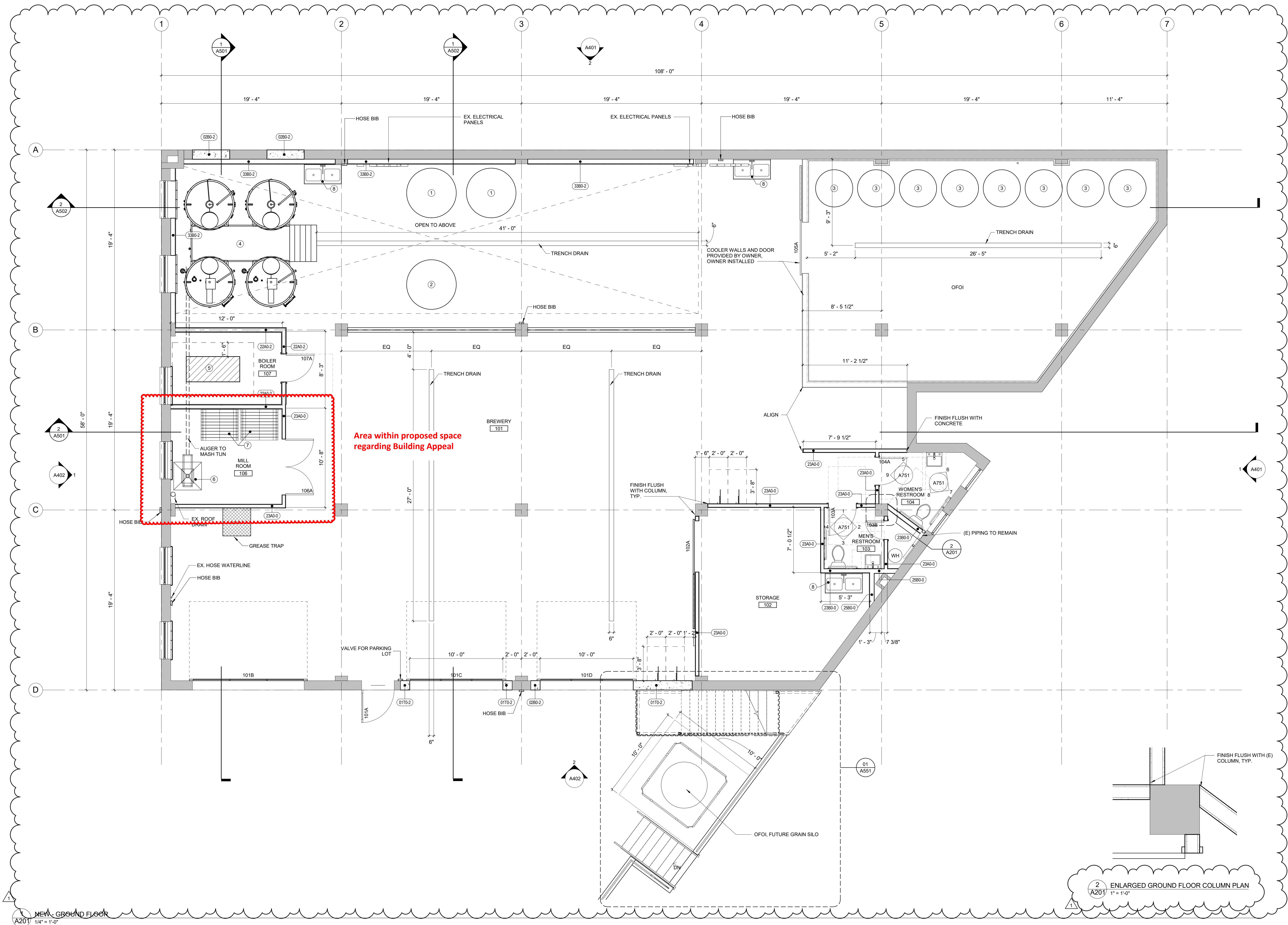


SHEET TITLE:
GROUND FLOOR PLAN

SHEET NO.:

A201

PERMIT ISSUE



GENERAL NOTES - FLOOR PLAN

- DIMENSIONS ARE TO FACE OF FRAMING AND MASONRY OR TO CENTERLINE OF COLUMNS AND OPENINGS U.N.O.
- REFER TO PROJECT MANUAL AND A911 FOR DOOR SCHEDULE.
- PROVIDE BACKING FOR ALL WALL MOUNTED ACCESSORIES, FURNISHINGS AND EQUIP. VERIFY WEIGHTS AND LOCATIONS.
- ALL FOOD PREPARATION AREAS AND RESTROOMS TO HAVE NON-ABSORPTIVE EPOXY FINISH CONCRETE FLOOR.
- ALL FOOD PREPARATION AREAS AND RESTROOMS TO HAVE FULL RPT HEIGHT FINISH UNLESS EQUIPMENT REQUIRES OTHERWISE, COORDINATE WITH KITCHEN EQUIPMENT SUPPLIER.

KEYED NOTES - FLOOR PLAN

NUMBER	TEXT
1	FERMENTER TANK
2	J&I BRITE TANK
3	SW BRITE TANK
4	BREWDECK
5	BOILER
6	GRAIN MILL
7	WOOD PALLET
8	DUMP SINK

RAD

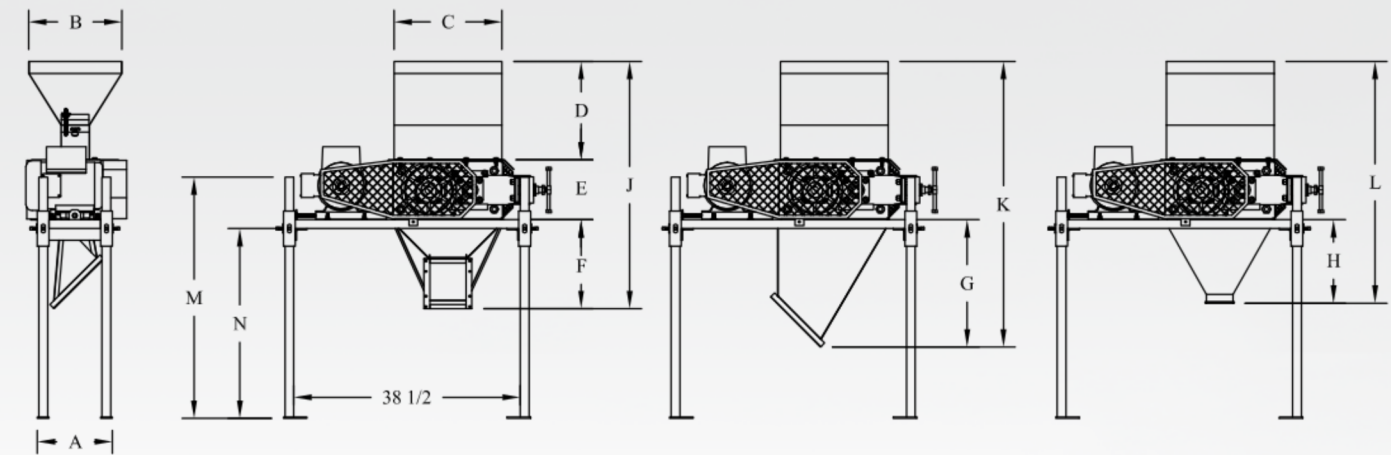


ROLLER MILL 200 & 300

www.radeq.ca • info@radeq.ca

5490, Martineau Street, Saint-Hyacinthe (Québec) Canada J2R 1T8
Phone: (450) 796-2626 / Toll free: 1-888-796-2723 / Fax: (450) 796-1830

ROLLER MILL MODEL 200 & 300



END VIEW

45° PERPENDICULAR OUTLET

45° PARALLEL OUTLET

BAGING OUTLET

MODEL	DIMENSIONS												
	A	B	C	D	E	F	G	H	J	K	L	M	N MAX.
200	12 3/4	15 7/8	18 1/4	16 3/4	10 1/4	15 1/8	21 5/8	14 1/8	42	48 5/8	41 1/8	41	38 1/2
300	15 3/4	15 7/8	18 1/4	16 3/4	10 1/4	15 1/8	21 5/8	14 1/8	42	48 5/8	41 1/8	41	38 1/2

SPECIFICATIONS AND CAPACITY OF SINGLE ROLLER MILL

MODEL	ROLLER DIAMETER	ROLLER WIDTH	CORRUGATION (TEETH/INCH)	DRY CORN	HIGH MOISTURE CORN	DRY SMALL GRAIN	HIGH MOISTURE SMALL GRAIN
200	6 1/2"	4 1/2"	5	4.3 T/H	3.7 T/H	—	—
			8.5 (INCLINED)	2.7 T/H	2.5 T/H	1.5 T/H	1.2 T/H
			10.5	—	—	1.2 T/H	1.0 T/H
300	6 1/2"	7 1/2"	5	7.0 T/H	2.5 T/H	—	—
			8.5 (INCLINED)	4.5 T/H	4.2 T/H	2.5 T/H	2.0 T/H
			10.5	—	—	2.1 T/H	1.7 T/H

SUGGESTED MOTOR

MODEL	GRAIN	HP	RPM
200	CORN	2	1800
	BARLEY	3	1800
300	CORN	3	1800
	BARLEY	5	1800

Specifications are subject to change without notice.

- * 57 ROCKWELL C TEMPERED STEEL ROLLER
- * HEAVY STEEL ROBUST CONSTRUCTION
- * EASY ACCESS MAGNET DRAWER
- * EASY PRESSURE AND SPACING OF THE ROLLERS
- * SAFETY MECANISM IN CASE OF FOREIGN OBJECT PASSING
- * OTHERS ACCESSORIES AVAILABLE

MANUFACTURED BY:

RAD

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Internet: www.radeq.ca

DISTRIBUTED BY :

Attachments:

- Tenant Improvement Floor Plan
- RAD Roller Mill 200 Cut Sheet

Should you have questions or need additional information please let me know. I look forward to hearing from you regarding this.

A handwritten signature in black ink, appearing to read 'K. Grant', with a stylized flourish extending from the end.

Kevin Grant
Senior Associate
C2K Architecture Inc.