

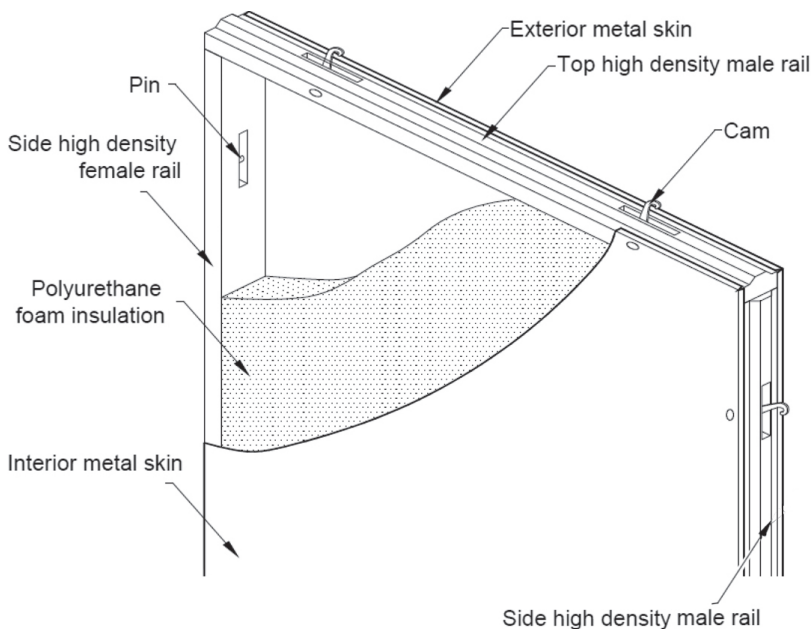


TMB Baking Proofer-Retarders

THE HEART OF ARTISAN BAKERIES™

A proofer-retarder-system is designed for the purpose of controlling fermentation in your bakery. TMB Baking R-P systems can be configured to accommodate anything from one single rack to hundreds of double racks or every option in-between. Whether retarding (slowing down) or proofing (speeding up) fermentation, the TMB Baking system is designed to serve the baker's needs.

Proofer-Retarder Design– As with all discussion with bakers, we start by understanding their dough processing needs and any physical space constraints that may impact their objectives. From there, we recommend a solution and a layout is developed with a foot-print of your “box.” We work hand-in-glove with Imperial-Brown manufacturing of Portland, OR and Salisbury, NC to design an enclosure that will work best for you. These 3 ½” insulated cam-lock stainless steel wall and ceiling panels, with reinforced, diamond-plate base doors provide a perfect environment to condition your dough. These units require a solid, non-water permeable (epoxy coated concrete or tile is most common), level floor for optimal performance.



Wall & Ceiling Panel Construction

Dough ‘Conditioning’– TMB Baking technicians specify the right quantity of our custom design air diffuser equipment (stainless steel reverse evaporators) inside the box to ‘condition’ the air to meet your objectives.

Diffusers always include:

- 2 low velocity, energy efficient, corrosion proof fans for circulating air through the chamber, either cool air for retarding or warm, humid air for proofing

Then we provide two configurations in the same housing:

FOR RETARDING

- Baked epoxy-coated refrigeration coil to achieve efficient cooling

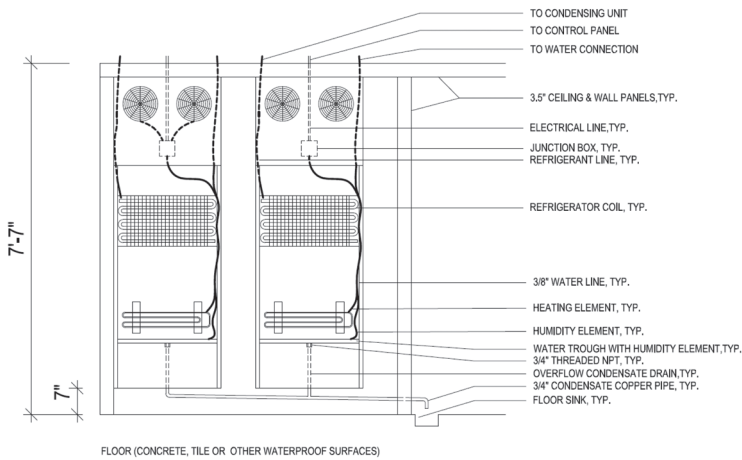
FOR PROOFING

- Heating element to achieve optimal proofing temperature
- Humidity element, always submersed in water to achieve optimal humidity level for proofing

A combination proofer-retarder includes all of the above equipment inside the box. For retarding, one or more condensing units are also specified, which can either be located on top of the box or remote (on top of bakery, outside at ground level, etc.), with appropriate weather and temperature protection based on your climate.

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Proofer-Retarder Diffuser Design



TMB Baking air diffusers circulate conditioned air throughout your proofer-retarder unit. The illustration, above, depicts the design and utility connections for the unit. When proofing, heat and humidity elements generate warm, moist air. Condensate is collected in a tray at the base of the box and piped to floor sink.

When retarding, a refrigeration coil inside the diffuser connected to a box- or roof/remote located condensing unit. For dedicated retarders, a defrost cycle is required. For straight proofers, refrigeration equipment is sometimes recommended for tightly established temperature range.

TMB Baking Proofer-Retarders standard utilities:

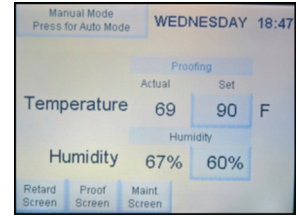
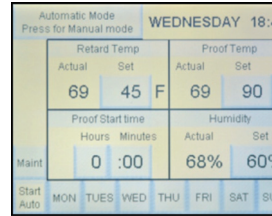
ELECTRICAL*

- 208-220V/60HZ/1 or 3-ph, neutral & ground (depending on condensing unit used) or
- 480V units, available on request
- Separate connection for light 120v, neutral & ground.
- Amperage based on each equipment configuration
- Water (tap) 1/4" – 1/2" incoming. 1/2" – 3/4" condensate.
- Floor drain or floor trench for condensate

REFRIGERATION*

- Refrigeration connections between diffusers and condensing unit(s). Requires a pump-down system.

* All electrical, plumbing & refrigeration connections should be made according to local codes by licensed contractors. TMB Baking is not licensed to provide these services and they are the customer's responsibility.



Easy-to use PLC touch screen

TMB Baking's custom, touchscreen managed proofer-retarder controls are the brain of the unit. We locate these above the door of the unit in order to protect them from racks or other equipment moving through the bakery. The control allows for both automatic and manual mode to set temperature and humidity. In the automatic mode, preset programming allows the baker to store common retarder-proofer settings, for retarding/proofing on a 7-day calendar/clock for the baker's complete flexibility. TMB proofer-retarders are a baker's sleep machine, allowing dough to be ready for baking when they are.

Approvals and Assurances

TMB Baking Proofer-Retarders have all of the certifications and approvals required by state, county and city organizations. The box is NSF approved and our controls are both ETL and BISSC certified. Units come with a 90-day warranty on labor and a full-year on parts. TMB always purchases the extra 4-year warranty on condensing units, as well, to give you full 5-years of protection on the compressor. Furthermore, on larger units we prefer to specify multiple condensing units in order to provide limited redundancy should one condensing unit go down. TMB Baking carries a supply of all of the parts required for your unit, with all electronics being US-manufactured.

References

TMB Baking has installed hundreds of proofer-retarders of all sizes and configurations across the US and Canada and other international locations, including Australia and South Korea. Please ask us for a reference near you.

