



## Smaller Commercial Kitchens

### Product Guide

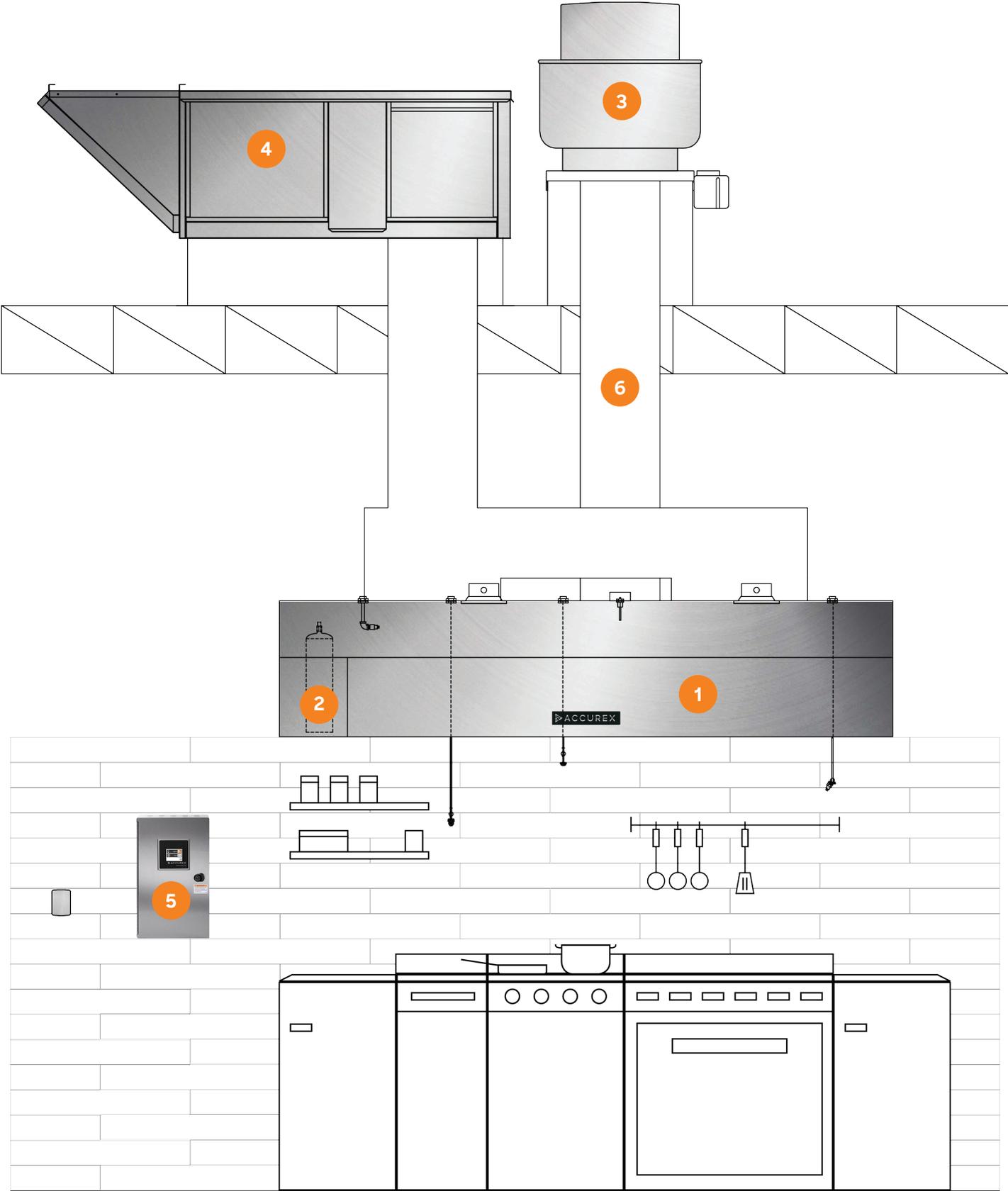
Each commercial kitchen needs a unique ventilation solution to fit its space. Accurex® provides a variety of options perfect for smaller-scale, single-hood or single-story restaurant kitchens.

**Use this guide to help you find the ideal solution configured to fit all your needs.**



# Six Common System Products – Fit for Your Space

There are six main products to consider when designing a kitchen ventilation system. They work together, fulfilling an important yet different purpose – and each features numerous accessories and upgrade options.



	DESCRIPTION	PRODUCT & ACCESSORIES	STANDARD	UPGRADE OPTIONS
<b>1 HOOD</b> 	<p>A stainless-steel hood over appliances removes heat/grease/smoke from cooking operations</p> <ul style="list-style-type: none"> <li>The hood contains lights, grease filters and features an externally mounted ASP</li> <li>An ASP is an air curtain supply plenum that utilizes duct connections to connect to the make-up air unit bringing replacement air into the kitchen space at the front of the hood</li> <li>A hood-mounted cabinet can be provided to contain fire suppression, controls and other accessories to reduce space used in the kitchen and simplify installation</li> </ul>	<p>Hood Grease Filters Lights ASP (for make-up air)</p> <p><i>Optional Accessories:</i> Backsplash Utility Cabinet for Fire Suppression/Controls Mini End Skirts Enclosure Panels</p>	<p><b>Baffle Grease Filter</b> Standard UL Listed Filter, baseline filtration levels with easy maintenance</p> <p><b>Globe Lights (incandescent)</b> Simple lighting through enclosed bulbs to provide a lighted cooking surface</p>	<p><b>Grease-X-Tractor™</b> Elevated grease filtration means less grease in the duct and at the fan, lower risk of fire in the duct</p> <p><b>Round Recessed LED Lights</b> Enhanced lighting for cooking, brighter cooking surface, lower utility costs and longer life of the lights</p>
<b>2 FIRE SUPPRESSION SYSTEM</b> 	<p>Protects the cooking lineup and hood system in the event of a cooking fire</p> <ul style="list-style-type: none"> <li>Includes a combination of tanks, releases, detection and gas valves, some of which can be built into the hood</li> </ul>	<p>Fire Suppression Tanks Release Detection Fire Piping Gas Valve</p> <p><i>Optional Services or Items:</i> Installation/Permit</p>	<p><b>Ansul R-102 Appliance Specific Protection</b> System designed and protected for your specific appliance lineup, provides the lowest cost fire protection</p>	<p><b>Ansul R-102 Overlapping Full Flood Protection</b> General coverage that allows for flexibility in moving most appliances around without the need for repiping the hood</p>
<b>3 EXHAUST FAN</b> 	<p>Pulls the exhaust air up through your hood filters and duct system</p> <ul style="list-style-type: none"> <li>Typically outfitted with a curb for roof application and is hinged for cleaning</li> <li>Can be configured with a Greenheck® Vari-Green® motor, which combines technology, controllability and energy efficiency into a single low-maintenance unit</li> <li>Accurex fans include advanced motor cooling options for long-lasting operation</li> </ul>	<p>Exhaust Fan Disconnect Hinged Curb Cap Grease Trap</p> <p><i>Optional Accessories:</i> Curb</p>	<p><b>Uplast Exhaust Fan</b> <i>Greenheck® Vari-Green® Motor - Direct Drive</i> Eliminates the common belt/pulley maintenance on traditional fans</p> <p><i>Single- or Three-Phase Motor</i> Single phase is necessary if you don't have three-phase power</p> <p><i>Fully Welded Fan-to-Curb Base</i> Prevents grease buildup on the roof</p>	
<b>4 MAKE-UP AIR UNIT</b> 	<p>A supply fan to replace the air removed by the exhaust fan, the make-up air unit brings fresh outdoor air into your kitchen to maintain balance</p> <ul style="list-style-type: none"> <li>Choose from multiple options for treating air before it enters the kitchen: including filters, heating, cooling and industry-leading airflow reduction/capabilities</li> </ul>	<p>Make-up Air Unit Air Filters</p> <p><i>Optional Accessories:</i> Heating Cooling Curb</p>	<p><b>Heating</b> In regions with temperatures under 55°F, provide heating of the outside air</p> <p>*See chart on second page</p>	<p><b>Heating and Cooling</b> In regions with temperatures over 75°F, provide cooling of the outside air, making it much more comfortable for the kitchen staff</p> <p>*See chart on second page</p>
<b>5 CONTROLS</b> 	<p>Electrical panel that operates all components of the kitchen ventilation system</p> <ul style="list-style-type: none"> <li>Features an easy-to-use, full-color touch screen user interface</li> </ul>	<p>Control Panel Touch Screen User Interface Hood Temp Sensors Motor Control BMS Interface</p> <p><i>Optional Accessories:</i> Room Sensor</p>	<p><b>Constant Volume System</b> On/Off operation of exhaust fan and make-up air through hood temperature sensing, fire system inputs or manual touch screen operation</p>	<p><b>Variable Volume System</b> On/Off operation of exhaust fan and make-up air with fan speed modulation based on cooking load, which saves energy and reduces utility costs (typical payback within 2 years of use)</p>
<b>6 GREASE DUCT</b> 	<p>Pre-engineered stainless-steel ductwork for use in a grease exhaust system</p> <ul style="list-style-type: none"> <li>Grease ducts provide the path for the exhaust air to travel from the hood to the exhaust fan and out of the building</li> <li>Accurex options allow for a pre-designed and tested round duct to be used in place of field fabricated duct systems</li> </ul>	<p>Stainless Steel Duct by Jeremias® Trim Ring</p>	<p><b>UL 1978 Single Wall Duct</b> Factory tested to extreme temperatures and a no-weld duct solution that reduces installation costs and simplifies compliance concerns</p>	<p><b>UL 1978 Double Wall Duct</b> Reduced clearance to combustible requirements</p> <p><b>UL 2221 Zero Clearance Duct</b> Reduced clearance to combustibles and 2 hour fire rating</p>

# Product Upgrades that Work for You



## LIGHTING

For more efficient lighting, round recessed LED lights provide a bright, warm light for cooking with significantly longer operating life.

- 50,000-hour service life – 50x longer than 100W incandescent bulb
- ~6% added upfront cost compared to incandescent globe lights (and you get the bulbs)
- Saves \$210/yr\* in utility costs – payback in about 8 months (*due to reduction in energy consumption by up to 80% vs. standard 100W bulb*)

\*8 ft hood example. Operating 12 hr/day, 6 days a week. 50 ft candles of light at the appliances.



## FILTRATION

There is more to consider than initial hood costs. Choosing the right filtration for your cooking needs upfront can help you save in the future, as maintenance costs for duct cleaning and removal of grease buildup in the duct and on the roof can add up over time.



### GREASE CAPTURE

REMOVES **28%**  
8 microns  
(0.5 - 0.6 in w.g.)\*

### LIGHT GREASE APPLICATIONS

minimal grease removal

### GREASE CAPTURE

REMOVES **69%**  
8 microns  
(0.7 - 0.8 in w.g.)\*

### HIGH PERFORMANCE

with minimal cost

\*Static pressure of a 9 ft hood at 2050 cfm

A one-time upfront cost will be incurred over baffle filters for significant grease extraction efficiencies with reductions in annual duct cleanings.



# Manage Energy Savings



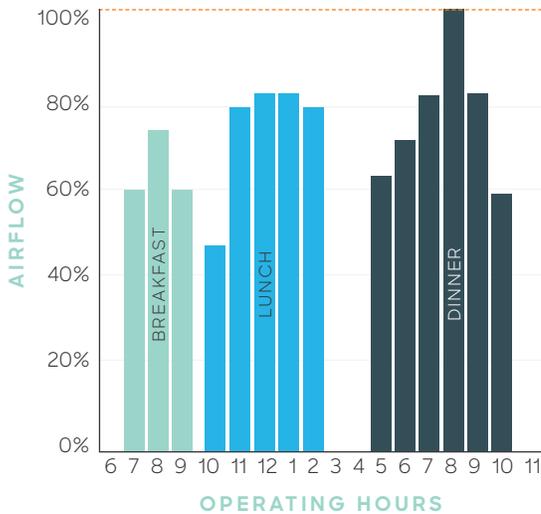
## VARIABLE VOLUME CONTROLS & MAKE-UP AIR

Accurex provides pre-engineered configurable controls and tempered make-up air units to effectively manage energy usage of your kitchen ventilation system throughout the day and provide comfort and safety for everyone in your building. With our variable volume controls upgrade, this option can typically pay itself back in one to two years and can provide up to 4x better energy savings.

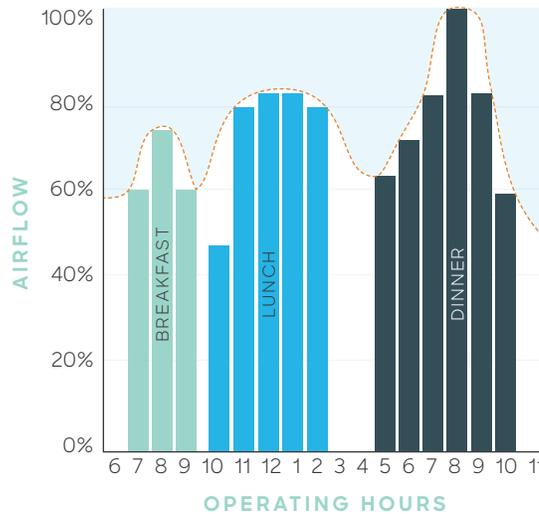


### COMPARE ACCUREX OPTIONS\*

**Constant Volume Control Fans Operate at Design Conditions**



**Variable Volume Control Fans Modulate Speed to Match Cooking**



**50% fan speed reduction**  
(20% for other brands)

**Only 12% electrical usage**  
(51% for other brands)

Combined with tempered heated make-up air units for **industry-leading 50% airflow reduction** for greater cost/energy usage savings with reduced gas consumption

\*Example: operating cost

	Constant Volume	Variable Volume w/(50% turndown)
Fan Electrical (kWh)	7,792	4,148
Heating Gas (Therms)	2,471	1,707
Electrical Cost	\$678	\$361
Gas Cost	\$2,397	\$1,655
Total Operating Cost	\$3,075	\$2,016
Annual Savings	\$0	<b>\$1,059</b>

ACCUREX SAVES YOU **\$1,059 EVERY YEAR**

12 ft hood system: 6 days a week, 7 a.m. - 10 p.m. operating hours, Pittsburgh, PA; \$0.09/kWh, \$0.97/therms



ACCUREX

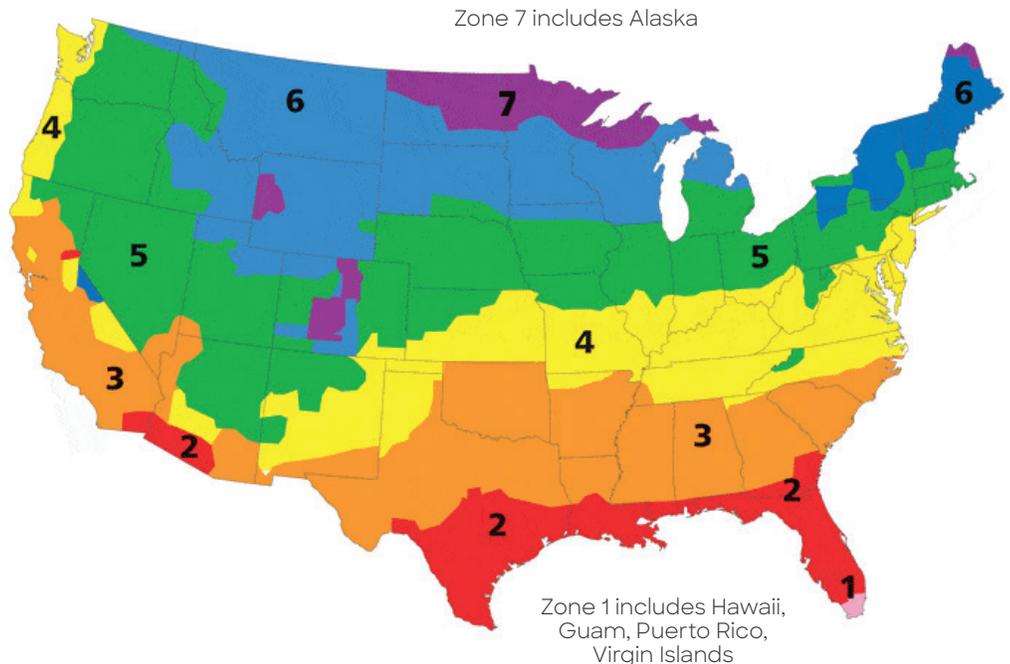
# More Value in the Comfort Zone

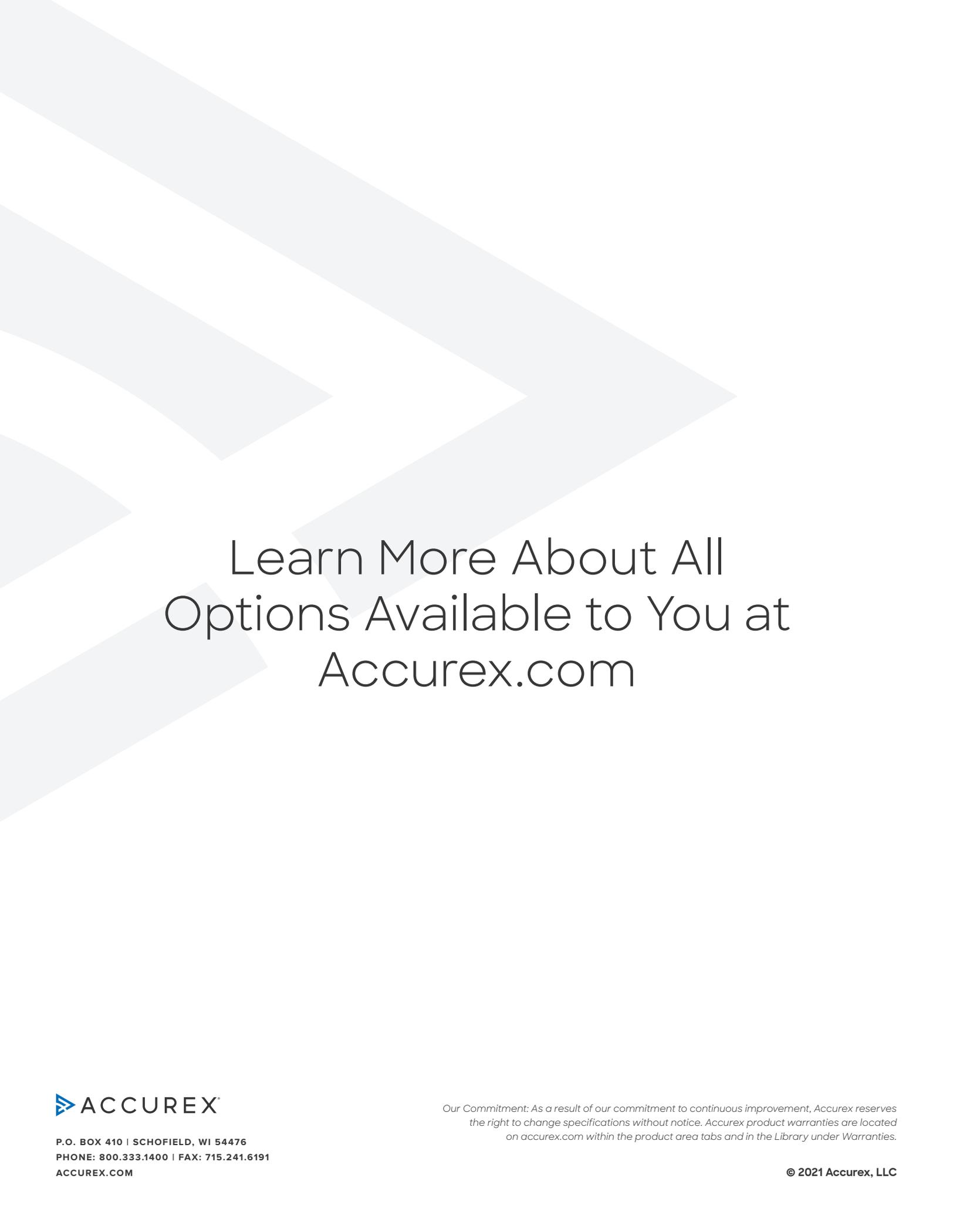
Accurex packaged cooling units adjust by region and start cooling 10 degrees sooner than some others when temperature in your kitchen reaches 75°F.

		ACCUREX			OTHERS		
		>75°F	<60°F	%H/C	>85°F	<55°F	%H/C
1	Miami, FL	75%	2%	77%	16%	<1%	16%
2	Austin, TX	51%	18%	69%	21%	11%	32%
3	Atlanta, GA	36%	32%	68%	12%	24%	36%
4	Nashville, TN	34%	39%	73%	11%	32%	43%
5	Pittsburgh, PA	19%	56%	74%	2%	47%	49%
6	Madison, WI	17%	62%	79%	2%	55%	57%
7	Fargo, ND	15%	60%	75%	3%	55%	58%

## CLIMATE CONTROL ZONE MAP

- Tempered MUA Upgrades**
- 1 Cooling
  - 2 Heating and Cooling
  - 3 Heating and Cooling
  - 4 Heating and Cooling
  - 5 Heating and Cooling
  - 6 Heating and Cooling
  - 7 Heating and Cooling





# Learn More About All Options Available to You at Accurex.com



P.O. BOX 410 | SCHOFIELD, WI 54476  
PHONE: 800.333.1400 | FAX: 715.241.6191  
ACCUREX.COM

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