ACCUREX

# Make-Up Air | Packaged Rooftops

Engineering Simplicity into Kitchen Ventilation Systems

# Quality doesn't have to be complicated.

When building out a commercial kitchen, you don't need complexity. You need answers. At Accurex®, we do the hard work for you. Everything we do—from engineering to aftermarket service—is designed to make it easy for you to succeed.

## Simplicity in every system.

When it comes to ventilation systems, we never stop improving. Through extensive prototype modeling, we create products that have higher efficiencies with lower installation and operating costs. And everything we create is built to be fully integrated throughout your kitchen. Easy to install, operate and maintain. Now that's worry-free simplicity, day in and day out.

## Select. Design. Done.

No matter if you're creating an expansive commercial kitchen or starting a small business, Accurex products are designed to fit all your ventilation needs. Our professionals along with our computer-aided product selection program (CAPS) help you select, configure and view real-time drawings. We then build and deliver your entire ventilation system quickly and efficiently, with an eye for exacting quality.

## One source. One call.

We are a Greenheck Group company, the world's leading manufacturer of commercial air movement and control equipment. You can rest easy knowing you're sourcing from one trusted provider. Just call or email an Accurex representative and you're on your way to a complete kitchen ventilation system. It's that easy.

## Engineered to work. Built to last.

Long before installation, our products undergo comprehensive testing. This includes structural integrity, aerodynamic performance, sound levels, mechanical operation, vibration, environmental impact and more. Accurex products carry several certifications, including AMCA, UL, NSF, and ETL. That not only means a more comfortable environment for workers and customers. It also means ventilation you can rely on now and well into the future.

# Accurex Make-Up Air & Packaged Rooftops

## UNTEMPERED MAKE-UP AIR UNITS

| Model | Heating Type | Cooling Type | Maximum Performance | | Page |
|---|---|---|---|---|---|
| XMSF | Untempered | Untempered | 5,300 cfm | 2 in. wg | 4-9 |
| XKFSB | Untempered | Untempered | 9,800 cfm | 2 in. wg | |
| XKFSD | Untempered | Untempered | 2,300 cfm | 1 in. wg | |

## DIRECT GAS-FIRED UNITS

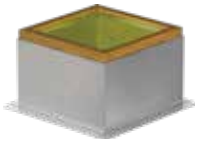
| Model | Heating Type | Cooling Type | Maximum Performance | | Page |
|---|---|---|---|---|---|
| XDG | Direct Gas-Fired | Evaporative, Direct Expansion | 15,000 cfm | 1,600 MBTU/hr | 10-25 |
| XDGX | Direct Gas-Fired | Evaporative, Chilled Water, Direct Expansion | 15,000 cfm | 2,000 MBTU/hr | |

## INDIRECT GAS-FIRED UNITS

| Model | Heating Type | Cooling Type | Maximum Performance | | Page |
|---|---|---|---|---|---|
| XIGX | Indirect Gas-Fired | Evaporative, Chilled Water, Direct Expansion | 15,000 cfm | 1,200 MBTU/hr | 26-35 |

## MODULAR SUPPLY UNITS

| Model | Heating Type | Cooling Type | Maximum Performance | | Page |
|---|---|---|---|---|---|
| XMSX | Electric<br>Hot Water<br>Steam<br>Untempered | Evaporative, Chilled Water, Direct Expansion | 15,000 cfm | 220 kW | 36-42 |

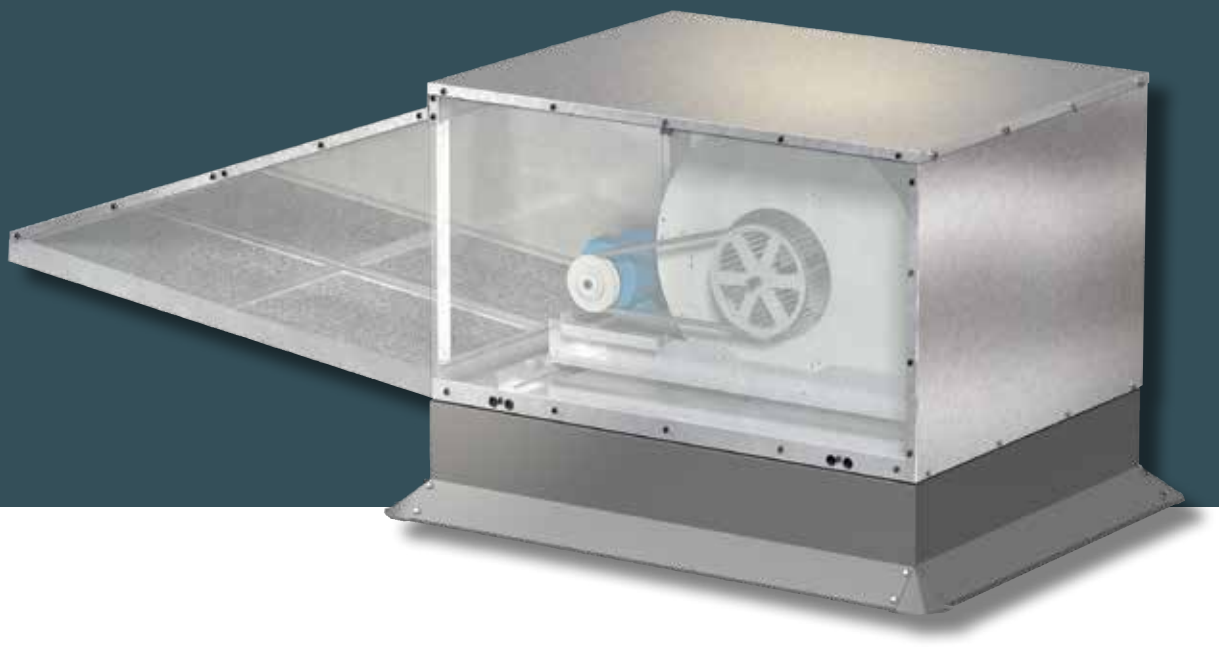


## ROOF CURBS

| Model | Page |
|---|---|
| Roof Curbs | 43-45 |

# Untempered Make-Up Air Units

*XKSFD, XKSFB, and XMSF models are ETL Listed to UL US 705*



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### ACCUREX UNTEMPERED MAKE-UP AIR UNITS OFFER THE FOLLOWING BENEFITS:

The Accurex untempered make-up air units are specifically designed to provide industry-leading performance and durability for restaurant and other foodservice applications. Untempered make-up air units are available in belt drive (XKSFB) and direct drive (XKSFD, XMSF) arrangements for maximum performance and flexibility. They provide airflow capacities up to 10,000 cfm (16,650 m³/hr) and static pressure capabilities up to 2.0 in. wg (497 Pa).

Accurex untempered make-up air units incorporate the industry's first hinged design. The hinged design minimizes installation time, while maximizes access to fan and motor assemblies. Accurex's untempered make-up air units feature:

· XMSF, XKSFB, and XKSFD sizes are ETL listed to UL 705

· All blower sizes are tested in our accredited laboratory to ensure accurate fan performance

· Casing is constructed of G90 galvanized steel

## MODEL NUMBER CODE:

The Model Number Code is designed to completely identify the unit. The correct code letters must be specified to designate the configurations and size.

**XKSFD – 70 – H05**

**MODEL**

**XKSFB** - Belt Drive
**XKSFD** - Direct Drive
**XMSF** - Direct Drive

**BLOWER SIZE**

**70 — 118**

**HOUSING SIZE**

**05 — 25**

## XKSFB / XKSFD

Model XKSFB (belt drive) and XKSFD (direct drive) supplies untempered make-up air where needed. Choose from a downturned or extended weather hood. Both are designed to provide compliance to NFPA 96 when used with a combination package. Horizontal and downblast discharge arrangements are available. Airflow ranges from 300 to 10,000 cfm (510 to 17,000 m³/hr).

# Standard Construction Features

**LIFTING LUGS**
Located on the base rail for ease of rigging and installation.

**NEMA-3R DISCONNECT**
Factory-mounted and wired to the motor. All wiring and electrical components comply with the National Electric Codes (NEC) and are either UL/C-UL US Listed or Recognized.

**G90 GALVANIZED CONSTRUCTION**
Provides superior corrosion resistance and ensures the appearance is maintained for the life of the unit.

**UL CLASS 2 WASHABLE FILTERS**
Effortlessly removable and cleanable one-inch aluminum mesh filters are sized such that air velocities do not exceed 900 fpm.

**VIBRATION ISOLATORS**
True vibration isolators contain two independent studs with rubber neoprene to support the drive assembly and blower, for long life and quiet operation.

**HINGED ACCESS DOOR**
Allows straightforward access to motor, drives and blowers for maintenance.

**UL 705 PRODUCT CERTIFICATION**
Assures the safety of electrical components and connections within power ventilators.

**BLOWER ASSEMBLIES**
Double-width, double inlet forward-curved fans are statically and dynamically, balanced. Ground and polished shafts mounted in permanently lubricated ball bearings.

**MOTOR**
Energy efficient motors, complying with EPACT standards for single speed ODP and TEFC enclosures, are carefully matched to the fan load.

**DRIVE ASSEMBLY**
Drives (where applicable) for a minimum of 150% of the driven horsepower. Machined cast pulleys are adjustable for final system balancing. Belts are static-free and oil-resistant.

# Accessories

**SPEED CONTROLLER**
Available on the XKSFD, the speed controller provides an economical means of system balancing.

**SPECIAL COATINGS**
Permatector™ coating is available for a durable long lasting finish. This is available in the standard color, Concrete Grey (RAL 7023).

**DISCHARGE BLOWER ARRANGEMENTS**
Multiple discharge arrangements are available to meet job specific requirements.

**INTAKE DAMPERS**
Intake dampers prevent unintended air transfer between the outside and the inside space. A gravity operated damper is available on both models XKSFD and XKSFB. Model XKSFB is available with a powered damper that is factory wired with a class II transformer.

**SUPPLY VOLTAGES**
Multiple voltages in single and three phase are available to conveniently match building power.

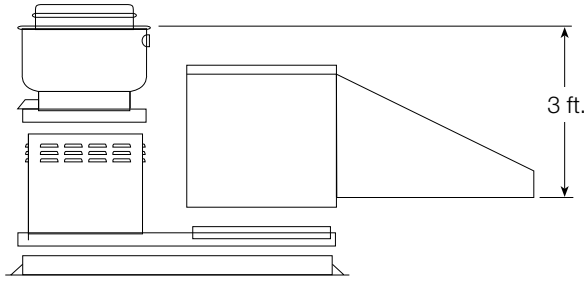
**WEATHERHOOD**
A standard downturn weatherhood provides a simplified method for meeting 36-inch vertical separation between supply and exhaust airstreams. The optional extended weatherhood assists in maintaining 10 feet horizontal separation between supply and exhaust airstreams. Both configurations are intended to assist in satisfying NFPA 96 requirements.

**ROOF CURBS**
Prefabricated roof curbs are available to reduce installation time and costs by ensuring compatibility between the fan and the roof opening. All curbs are lined with fiberglass insulation to prevent condensation and to reduce sound levels. Model XKSFB is available with combination packages to allow an exhaust fan and make-up air fan to be mounted on a common curb. The combination package provides a simplified way to comply with NFPA 96 supply and exhaust airstream separation requirements.

With either ten feet of horizontal separation or three feet of vertical separation, Accurex has a combination package for your requirements. The Accurex combination package simplifies installation and reduces field labor costs. This pre-engineered design offers the benefit of only one roof penetration for both supply and exhaust ducts, while ensuring complete compatibility and interface between the supply fan, exhaust fan, curb and combination extension. Accurex combination packages are specifically designed to comply with NFPA 96, which states:

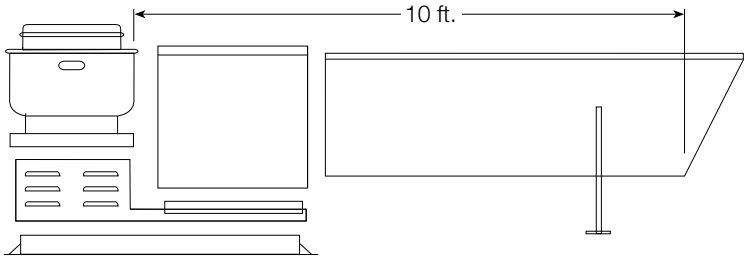
- Exhaust duct must terminate at least 24 in. above the roof deck
- Fan discharge must terminate at least 40 in. above the roof deck
- There must be at least 10 ft. of horizontal or 3 ft. of vertical separation between the intake and exhaust discharge

### 3 FT. VERTICAL SEPARATION - STANDARD WEATHERHOOD




Provides 3 ft. of vertical separation for compliance to NFPA 96.

### 10 FT. HORIZONTAL SEPARATION - EXTENDED WEATHERHOOD

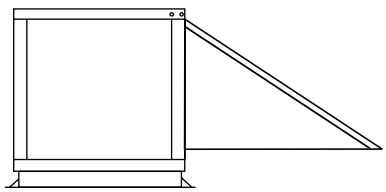



Provides 10 ft. of horizontal separation for compliance to NFPA 96.

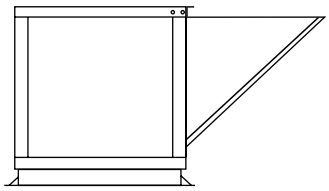
*Note: Consult local codes and the authority having jurisdiction if there are questions concerning the use of this product.*

## Standard Arrangements

Models XKSFB and XKSFD have a compact design that is available in both downblast discharge (arrangement DB) and horizontal discharge (arrangement HZ). Installations may be as stand alone supply fans as pictured at right or as combination packages with exhaust and supply fans on a common curb.



Arrangement DB

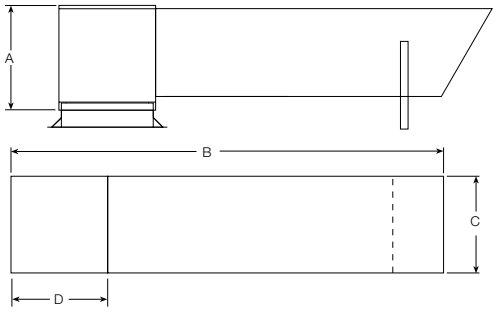


Arrangement HZ

## Standard Curb - Extended Weatherhood

| Housing Size | A | B | C | D |
|---|---|---|---|---|
| H05 | 14.5 | 171.1 | 20.0 | 21.3 |
| H08 | 14.5 | 165.8 | 36.9 | 21.3 |
| H15 | 22.3 | 145.3 | 31.9 | 40.8 |
| H25 | 29.5 | 152.5 | 40.3 | 52.3 |

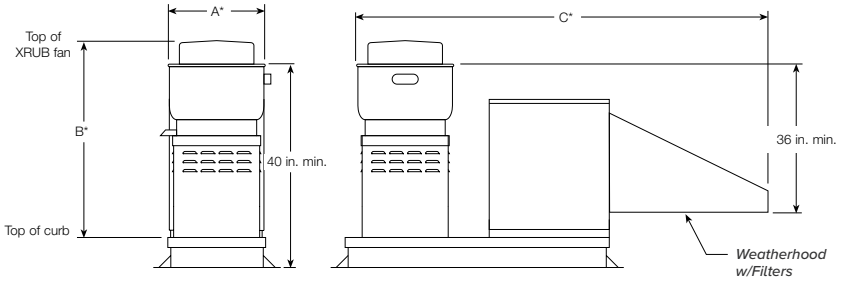
*All dimensions in inches.*




## Combination Curb - Standard Weatherhood

| Housing Size | A* | B* | C* |
|---|---|---|---|
| H05 | 25.0 | 50.0 | 70.1 |
| H08 | 35.4 | 52.9 | 82.5 |
| H15 | 42.9 | 55.0 | 131.8 |
| H25 | 58.8 | 66.1 | 164.3 |

*All dimensions in inches.*

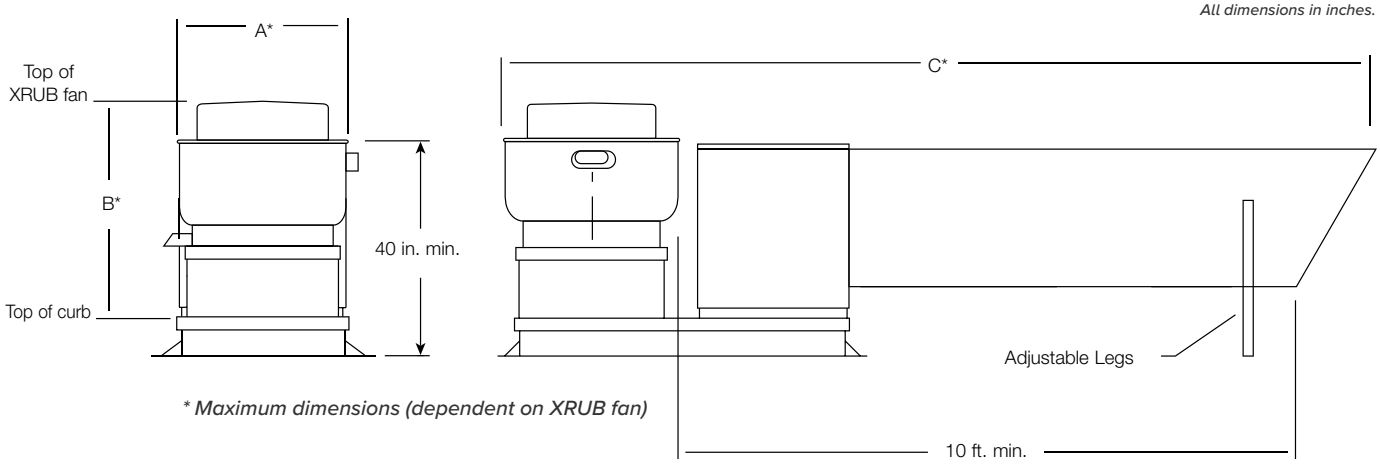



** Maximum dimensions (dependent on XRUB fan)*

## Combination Curb - Extended Weatherhood

| Housing Size | A* | B* | C* |
|---|---|---|---|
| H05 | 25.0 | 50.0 | 200.3 |
| H08 | 35.4 | 52.9 | 207.3 |
| H15 | 42.9 | 55.0 | 196.6 |
| H25 | 58.8 | 66.1 | 217.3 |

*All dimensions in inches.*




** Maximum dimensions (dependent on XRUB fan)*

# Direct Gas-Fired Units

*XDG model shall be ETL Listed to ANSI Z83.4 and CAN 3.7. XDGX shall be ETL Listed to ANSI Z83.4-1999, CSA 3.7-M99 for 100% outdoor air*

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Accurex direct gas-fired heaters provide tempered make-up air to restaurant and other foodservice facilities. They use an ultra-efficient line burner to reduce energy costs, while maintaining tight temperature control. The line burners are constructed of durable stainless steel mixing plates and cast aluminum manifolds for years of reliable performance. Two models of direct gas-fired make-up air units are available to serve a variety of heating and cooling applications. Multiple blower sizes provide airflow capacities up to 15,000 cfm (25,485 m³/hr) and static pressure capabilities up to 2.0 in. wg (497 Pa).

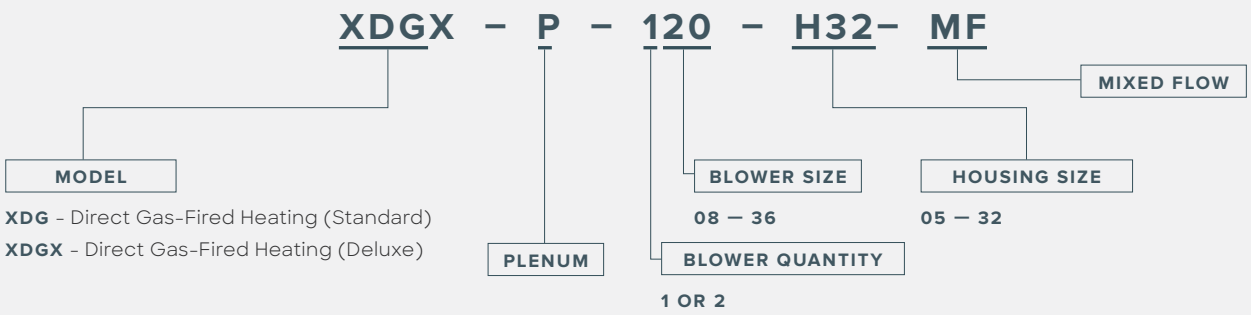
A wide range of direct gas-fired line burners, with capacities up to 2,000 MBTU/hr, provide efficient heating in any climate. Direct-gas-fired heater housings incorporate a flexible design, and are constructed of durable G90 galvanized steel suitable for indoor and outdoor installations. These direct gas-fired heaters are available with a wide range of construction and control accessories for maximum flexibility and performance.

**ACCUREX'S DIRECT GAS-FIRED MAKE-UP AIR UNITS FEATURE:**

- High-quality cast aluminum burners with stainless steel mixing plates and electronic modulation burner control
- Variable volume ventilation capabilities provide energy savings, increased equipment life and enhance employee comfort
- All Accurex direct gas-fired heaters are certified to the ANSI Z83.4 safety standard
- All blower sizes are tested in our accredited laboratory to ensure accurate fan performance

## MODEL NUMBER CODE:

The Model Number Code is designed to completely identify the unit. The correct code letters must be specified to designate the configurations and size.



## XDG

Model XDG sets the standard for an efficient approach to 100% outdoor air applications. Airflow volumes range from 800 to 15,000 cfm (1,359 to 25,485 m³/hr) with heating capacities up to 1,600,000 MBTU/hr.

**COOLING OPTIONS:**

- Evaporative cooling up to 12,000 cfm (20,388 m³/hr)
- Packaged DX Cooling up to 6000 cfm and 10 tons

## XDGX

Model XDGX is a highly configurable, 100% efficient direct gas-fired heating and ventilating unit. It's modular design provides the most configuration flexibility and expanded heating and airflow capacities, which is designed for providing make-up air to commercial and industrial facilities. In addition to 100% outdoor air operation, variable volume airflow options are available. Airflow volumes range from 800 to 15,000 cfm (1,359 to 25,485 m³/hr) with heating capacities up to 2,000,000 MBTU/hr.

**COOLING OPTIONS:**

- Evaporative cooling up to 15,000 cfm (25,485 m³/hr)
- Chilled water or direct expansion (DX) cooling up to 11,000 cfm (18,689 m³/hr)
- Packaged DX cooling up to 7500 cfm and 16 tons

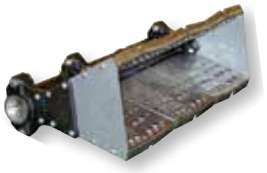
### DURABLE CONSTRUCTION

Designed for maximum weather resistance, XDGX and XDG housings are galvanized steel. Lifting lugs are standard.

### DIRECT GAS-FIRED SYSTEM

Direct gas-fired make-up air units feature:

- High-quality cast aluminum burners with stainless steel mixing plates
- Electronic modulation burner control
- 25:1 turndown ratio



### CONTROL CENTER

The control center includes the following standard components:

- Magnetic motor starter
- Control transformer
- Disconnect switch

Premium grade control components are selected for reliable operation. All electrical components are UL Listed, Recognized or Classified and factory prewired for single point power connection.

### VIBRATION ISOLATORS

The entire fan and motor assembly is mounted on vibration isolators to minimize noise transmission into the building.

### RELIABLE FAN PERFORMANCE

Air performance ratings from the Accurex test chamber ensure accurate data.

Double-width, double inlet, forward-curved wheels for high-efficiency and low sound levels are constructed of heavy-gauge steel. Wheels are statically balanced to ensure vibration-free operation.

### ACCESS PANELS

Large access panels are provided for easy inspection and maintenance of motors, drives, fan wheels, filters, and heater controls.

### FACTORY WIRED AND TESTED

All units are tested prior to shipment. Units are checked for proper operation of the gas train, electrical components and airflow.

### BIRDSCREEN WEATHERHOOD

The birdscreen weatherhood features a wire mesh intake, which prevents large debris from damaging the filters. An additional filter section is required.

### FILTERED WEATHERHOOD

The filtered weatherhood includes aluminum mesh filters mounted in the intake, eliminating the need for an additional filter section.

### LOUVERED WEATHERHOOD

The louvered weatherhood includes a louvered intake and aluminum mesh filters in a compact design that requires no additional filter section.

### V-BANK FILTER SECTION

A V-bank filter section is standard on units with a birdscreen weatherhood. Specify either 2-inch washable aluminum mesh filters or 2-inch disposable filters.

### WEATHERHOODS

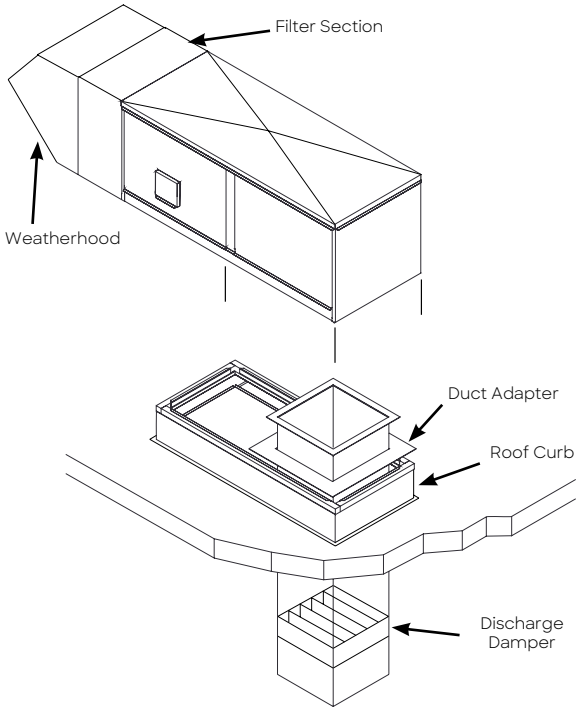
Weatherhoods with standard G90 galvanized steel construction are available. Duct Adapter – Provides easy means for attaching ductwork to curb and allows installation of top section of duct prior to setting the unit on the curb.

### ROOF CURB

Factory provided roof curbs are available to ensure compatibility between the make-up air unit and roof curb. Standard construction is G90 galvanized steel and includes 1-inch insulation.

### OUTLET DAMPER

A discharge damper prevents both backdrafts when the fan is not in operation and condensation inside the unit during cold weather conditions. A wide variety of backdraft and control dampers are available for field installation.



### SPECIAL COATINGS
Permatector™ coating is available for a durable, long lasting finish. Decorative coatings are also available in a variety of colors to match existing building fixtures. Consult your Accurex representative for coating selections.

### ROOF CURBS
Factory provided roof curbs are available to ensure compatibility between the make-up air unit and roof curb. Standard construction is G90 galvanized steel. See the roof curbs section in this catalog for more information.

### DUCT ADAPTER
Duct adapter is available with factory supplied roof curbs. The duct adapter allows for easy alignment of the supply duct connection.

### V-BANK FILTER SECTION
V-bank filter sections are available with 2-inch washable aluminum mesh or MERV 8 or MERV 13 disposable filters.

### WEATHERHOODS
Three weatherhoods are available: birdscreen, filtered, and louvered. Standard construction is G90 galvanized steel.

### MOTORIZED DAMPERS
Intake or outlet dampers are available to prevent backdrafts when the supply fan is not in operation. Intake dampers are factory-mounted and wired. Discharge dampers ship loose for field mounting in the supply air duct.

### FIBERGLASS INSULATION
One-inch fiberglass insulation is available to line the housing to prevent the formation of condensation and to form an acoustical barrier.

### DOUBLE WALL CONSTRUCTION
An interior metal liner is available to isolate the 1-inch fiberglass insulation from the airstream.

### EXHAUST FAN STARTER
Exhaust fan starters are available factory-mounted and wired. Exhaust fan starters allow for an electrical interlock between the supply and exhaust fan.

### FREEZE PROTECTION
Electronic freeze protection is available to automatically shut down the supply fan when the discharge temperature is below 45°F for an extended amount of time. This prevents the unit from discharging non-tempered air into the building and freezing pipes and other temperature sensitive items.

### INLET AIR SENSOR (HEAT)
The heating inlet air sensor will automatically turn the heat on and off based on the outdoor air temperature.

### SERVICE RECEPTACLE
A 115 volt GFCI outlet is mounted externally in a NEMA-3R box for the convenience of service personnel.

### AUXILIARY CONTACTS
Normally open and normally closed contacts are available for supply fan status and supply fan interlocks.

### DIRTY FILTER SWITCH
Indicates when filters become dirty. An indicator light may be wall/beam mounted or provided with a remote control panel.

### PROPANE GAS
A propane heater may be provided in lieu of natural gas.

### GAS PRESSURE REGULATOR
Required if building gas line pressure exceeds the maximum inlet gas pressure of the make-up air unit. Ships separately for field installation.

## Temperature Controls


**DISCHARGE TEMPERATURE CONTROL**

Control of discharge air temperature is accomplished with a factory-installed sensor located at the fan discharge. A Maxitrol 14 system modulates the gas valve to provide the desired discharge temperature.

**DDC INTERFACE**

The discharge temperature can be controlled by a DDC signal. The DDC options provides a factory-installed interface. The heating output can be controlled using a 2-10 VDC or 4-20 mA signal.

**DISCHARGE TEMPERATURE CONTROL WITH ROOM OVERRIDE**

The room override option, available with the Maxitrol 14 system, boosts the discharge temperature when the space temperature is too cool. Discharge sensor is factory installed. Room sensor may be wall/beam mounted or included on a remote control panel.

## Discharge Options

**DOWNBLAST DISCHARGE**

**HORIZONTAL DISCHARGE**

**UPBLAST DISCHARGE**

# Cooling Options

### EVAPORATIVE COOLING

The optional evaporative cooling section includes a galvanized steel housing with a louvered intake, 2-inch aluminum mesh filters and a stainless steel evaporative cooling module. The evaporative cooling media is Munters GLASdek and has a depth of 12 inches for minimum of 90% cooling effectiveness.

The entire section mounts directly to the front of the unit, eliminating transition or ductwork by others. Drain and overflow are conveniently tapped through the side of the cooling section. The supply line connection is field located where convenient. Freeze protection, automatic drain & fill, and recirculation are also available.

### COOLING COILS

Chilled water or direct expansion (DX) cooling is available (XDGX only). The cooling section includes the cooling coil, sloped stainless steel drain pan and insulated double wall construction. Drain and coil connections are stubbed through the wall for convenience. For proper coil sizing, contact your local Accurex representative. Four-row and six-row chilled water or DX coils are available with airflow capacities up to 11,700 cfm (19,900 $m^3$/hr).

Cooling coil sections are installed upstream of the fan section for a draw through arrangement and provide a streamlined transition to adjacent sections. DX coils require remote condensing units.

# Cooling Options Continued

**PACKAGED DIRECT EXPANSION – MODEL XDGX / XDG**

Providing unconditioned make-up air can create an uncomfortable work environment during summer months. Although conditioned make-up air can increase comfort levels, the need to cool and dehumidify this air to a 55°F supply air temperature can significantly increase equipment first cost and annual energy consumption.

**AIRFLOW ARRANGEMENT**
Operational Variable Air Volume or Constant Volume 100% Outdoor Air

**PERFORMANCE RANGE**
800 to 7,500 cfm

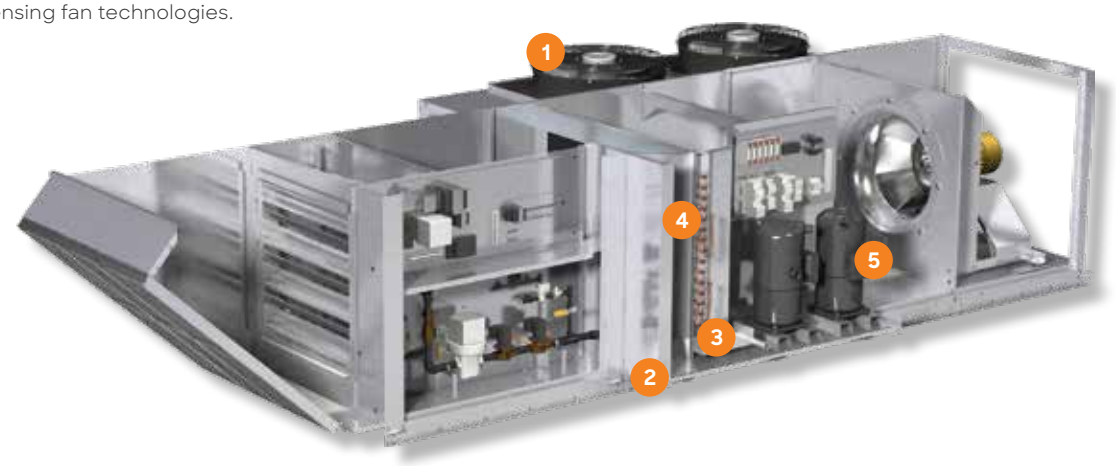
**COOLING CAPACITY**
2.5 to 16 Nominal Cooling Tons

The packaged DX cooling option is designed to sensibly cool the outside air to a 65-75°F supply air condition to improve space comfort and enhance employee productivity at an economical first cost.

| FEATURES | BENEFITS |
|---|---|
| Draw-thru cooling arrangement | Even airflow across coils for efficient cooling operation and less chance of water carryover |
| Standard high/low pressure cutouts and crank case heaters | Increased compressor life |
| Low discharge temperature cutout | Assists in preventing frost from forming on the coil during part load conditions or low airflows |
| Optional variable capacity compressor | Modulates DX cooling system for precise temperature control, saving operational energy |

1 **CONDENSING FANS**
Standard direct drive condensing fans with serrated blades provide increased efficiency and reduced sound levels over traditional condensing fan technologies.

2 **SERVICE ACCESS** Standard lift-off or optional hinged panels provide easy access to refrigeration components. Components are mounted in an isolated compartment to allow service without affecting airflow.




3 **DRAIN PAN**
The evaporator coil is mounted on an insulated double-sloped stainless steel drain pan.

4 **CONDENSER AND EVAPORATOR COILS**
Copper tubes are mechanically expanded in aluminum fins. Optional ElectroFin® coil coating for added corrosion resistance.

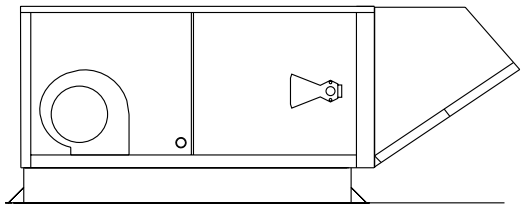
5 **COMPRESSORS**
Hermetically sealed scroll compressors are mounted on neoprene isolators to minimize noise and vibration transmission. An optional variable-capacity compressor is available for the lead circuit.

| | XDG | XDGX |
|---|---|---|
| **Intake Options** | | |
| Birdscreen Weatherhood | Optional | Optional |
| Filtered Weatherhood | Optional | Optional |
| Louvered Weatherhood | Optional | Optional |
| **Temperature Controls** | | |
| Discharge Temperature Control | Optional | Optional |
| Discharge Temperature Control w/ Room Override | Optional | Optional |
| DCC Room Interface Control | – | Optional |
| **Discharge Options** | | |
| Downblast Discharge | Optional | Optional |
| Horizontal Discharge | Optional | Optional |
| Upblast Discharge | – | Optional |
| Combination Package | Optional | - |
| **Cooling Options** | | |
| Evaporative | Optional | Optional |
| Split Direct Expansion (DX) | – | Optional |
| Chilled Water | – | Optional |
| Packaged (DX) | Optional | Optional |
| **Accessories** | | |
| Special Coatings | – | Optional |
| Roof Curbs | Optional | Optional |
| Duct Adapter | Optional | Optional |
| V-Bank Filter Section | Optional | Optional |
| Fiberglass Insulation | Optional | Optional |
| Double Wall Construction | Optional | Optional |
| Exhaust Fan Starter(s) | Optional | Optional |
| Dirty Filter Switch | Optional | Optional |
| Freeze Protection | Optional | Optional |
| Inlet Air Sensor – Heat | Standard | Standard |
| Service Receptacle | – | Optional |
| Auxiliary Contacts | Optional | Optional |
| Intake Dampers | Optional | Optional |
| Discharge Dampers | Optional | Optional |
| Gas Pressure Regulator | Optional | Optional |
| Propane Heater | Optional | Optional |
| Variable Air Volume | Optional | Optional |

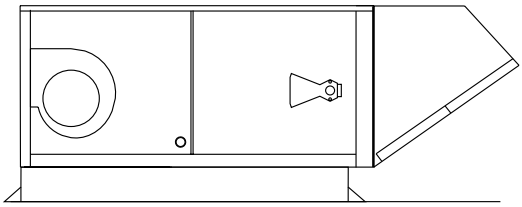
# Stand Alone Arrangements

**DOWNBLAST OR HORIZONTAL DISCHARGE**

Models XDGK and XDG are available for stand-alone installations with a downblast (arrangement DB) or horizontal (arrangement HZ) discharge.



*Downblast Discharge - Arrangement DB*



*Horizontal Discharge - Arrangement HZ*

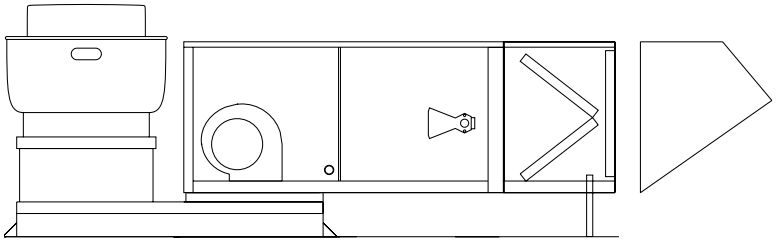
# Combination Packages

**KITCHEN COMBINATION PACKAGE**

The Accurex combination package simplifies installation (model XDG) and reduces field labor costs. The pre-engineered design ensures that the supply fan, exhaust fan, curb, and combination extension components interface properly for kitchen ventilation applications. Equally important, Accurex combination packages are specifically designed to comply with NFPA 96.

NFPA 96 states:

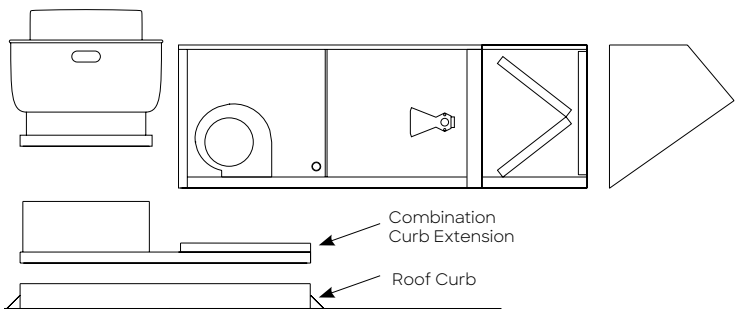
- Exhaust duct must terminate at least 24 inches above the roof deck
- Fan discharge must be at least 40 inches above the roof deck
- Air intake shall have a horizontal separation of 10 feet from the exhaust discharge



*Combination Package - Arrangement DBC*

*Note: Consult local codes and the authority having jurisdiction if there are questions concerning the use of this product.*

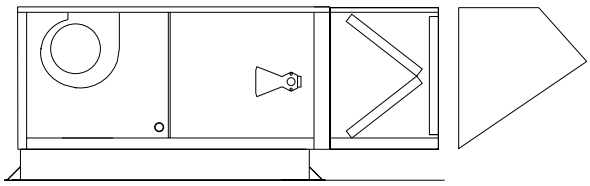
The combination curb extension is the component that pulls the Combination Package together, providing a factory-engineered interface between the roof curb and the fans. With a standard 12-inch roof curb, louvered weatherhood, and Accurex model XRUB exhaust fan, the combination curb extension will ensure compliance to the above NFPA 96 requirements.



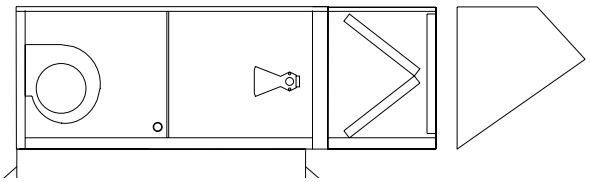
# Roof Mounted Installation

**DOWNBLAST, UPBLAST OR HORIZONTAL DISCHARGE**

Model XDGX is available for stand-alone installations as shown below. Downblast (arrangement DB), upblast (arrangement UB), or horizontal (arrangement HZ) discharge may be specified.



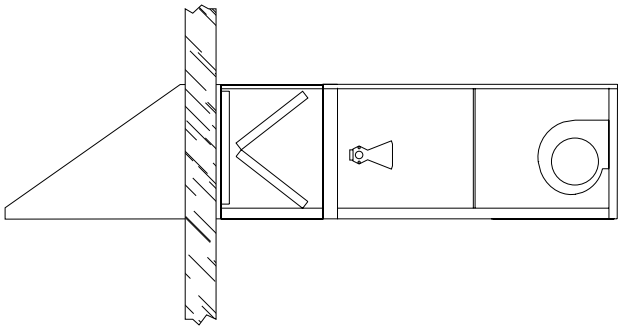
*Upblast Discharge - Arrangement UB*



*Horizontal Discharge - Arrangement HZ*

# Thru-Wall Installation

Model XDGX (Housing 12, 22, & 32 only) is available with a pre-engineered thru-wall installation option, which is ideal when a roof penetration is not desirable. Factory options that facilitate easy installation and ensure problem free operation:



**WEATHERHOOD**

A full downturn design with generous intake area to minimize intake velocity and moisture entrainment.

**THRU-WALL SLEEVE**

Sleeve provides attachment interface between weatherhood and burner section. Accommodates walls up to 15 inches in depth.

**FILTER SECTION**

Aluminum mesh media filters outdoor air and strips fine mist from the air. A drain pan weeps moisture out the front of the wall sleeve.

# Variable Volume

Variable volume systems on kitchen applications are a great way to save energy and reduce operating costs. The variable volume option is used to provide a fully integrated system with Accurex variable volume systems.

Accurex systems sense the heat and in some cases smoke output from the cooking operation, and exhausts only the amount of air necessary. The integrated system will send a signal to the make-up air unit to vary the airflow and maintain proper air balance.

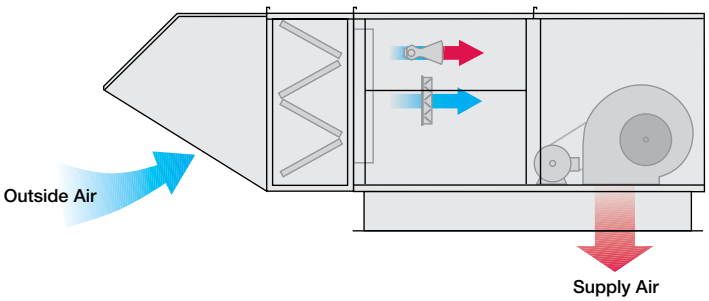
### AIRFLOW CONTROL STRATEGIES

Accurex offers three methods of controlling the make-up air volume. All three vary the fan speed for maximum energy savings.

- Variable frequency drive controlled by cooking load
- Variable frequency drive controlled by a 2-10 VDC or 4-20 mA signal
- 2-speed controlled by contact closures

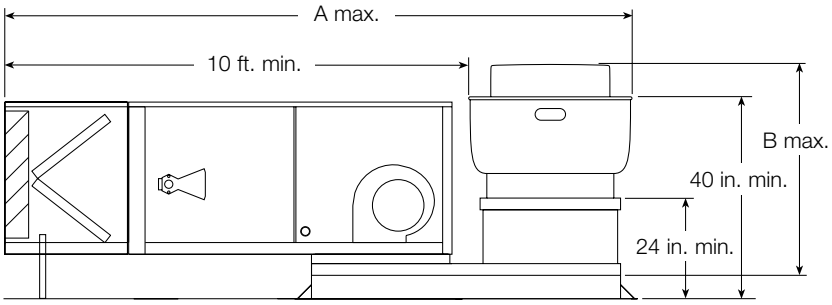
### BURNER BYPASS DAMPER

The variable volume option includes a patented bypass damper, which maintains the pressure drop across the burner as air volumes change. This assures that complete and proper combustion occurs. The bypass damper is self-adjusting, designed for minimal maintenance, and requires no controls.



# XDG Dimensions

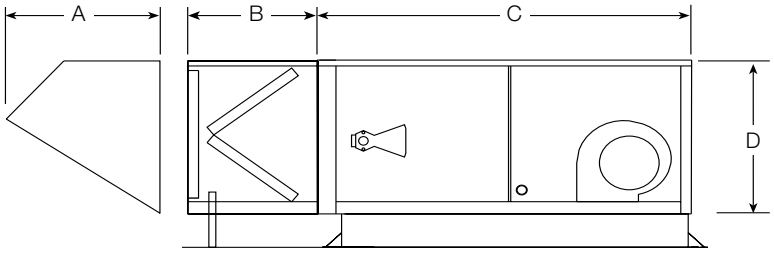
## COMBINATION PACKAGE - ARRANGEMENT DBC




| Housing Size | A* | B* | Width |
|---|---|---|---|
| H10 | 159.5 | 47 | 35.5 |
| H20 | 172.8 | 57.8 | 50 |
| H30 | 199 | 63.3 | 58.8 |

*All dimensions in inches.*
**Based on largest available XRUB exhaust fan.*

## STAND ALONE - ARRANGEMENT DB

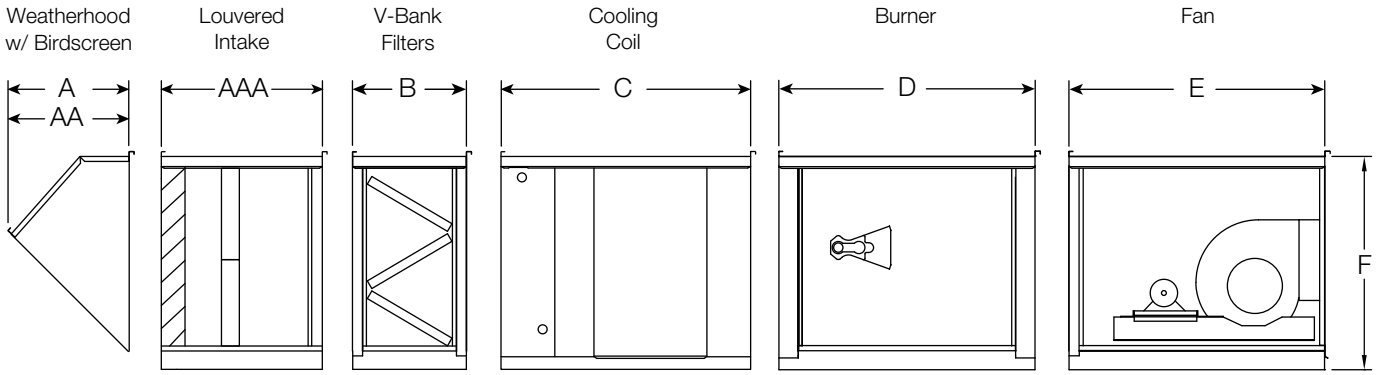



| Housing Size | Max MBH |
|---|---|
| H10 | 400 |
| H20 | 800 |
| H30 | 1600 |

| Housing Size | A | | | B* | C | D | Width |
|---|---|---|---|---|---|---|---|
| | Filtered | Louvered | Birdscreen* | | | | |
| H10 | 31.8 | 27.5 | 26.3 | 27.8 | 78.3 | 33.8 | 28 |
| H20 | 34.8 | 30.3 | 32.3 | 30.3 | 86.3 | 33.8 | 37 |
| H30 | 65.3 | 33.3 | 28.3 | 33 | 101.8 | 42.5 | 48 |

*All dimensions in inches.*
**The birdscreen weatherhood requires an additional filter section. The additional filter section is optional with the filtered or louvered weatherhood.*

# XDGX Dimensions




*AA - Filtered Weatherhood

| Housing Size | A | AA | AAA | B | C | | D | E | F | Width |
|---|---|---|---|---|---|---|---|---|---|---|
| | Weatherhood w/ birdscreen | Filtered Weatherhood | Louvered Intake | V-Bank Filter | Low | High | Burner | Fan | | |
| H12 | 29.9 | 31.5 | 13.8 | 21.5 | 30 | 50.4 | 37.6 | 42.5 | 39 | 33.6 |
| H22 | 45.6 | 47.1 | 16.9 | 24 | 30 | 69.4 | 52.3 | 52.2 | 44.9 | 44.1 |
| H32 | 47.3 | 48.7 | 16.9 | 25.8 | 98 | | 52.5 | 66 | 48.7 | 53.1 |

*All dimensions in inches.*

# Indirect Gas-Fired Units

*XIGX models are ETL and cETL Listed to ANSI Z83.8-2002 and CGA 2.6. Indirect gas-fired units are Listed to UL 1995. Both are harmonized standards between USA and Canada.*

ACCUREX

Accurex indirect gas-fired heaters provide tempered make-up air to restaurants and other foodservice facilities. Accurex indirect gas-fired heaters use an 80% efficient tubular style heat exchanger for high performance and tight temperature control. The Accurex heat exchanger design features horizontally firing burners and power venting with post purge cycle, which together provide flexibility, maximum heat exchanger life, and make stainless steel burners unnecessary and drip pans obsolete. Two models of indirect gas-fired make-up air units are available to serve a variety of heating and cooling applications. Seven available blower sizes can provide airflow capacities up to 15,000 cfm (25,485 m³/hr) and static pressure capabilities up to 2.0 in. wg (497 Pa).

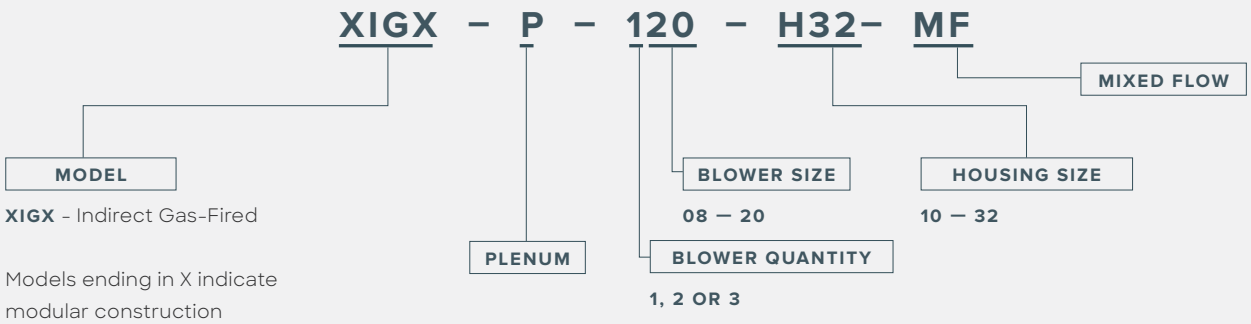
A wide range of indirect gas-fired heaters, with capacities up to 1,200,000 MBTU/hr, provide efficient heating in any climate. Indirect gas-fired heater housings incorporate a flexible design, and are constructed of durable G90 galvanized steel. Accurex indirect gas-fired heaters are available with a wide range of construction and control accessories for maximum flexibility and performance.

**ACCUREX INDIRECT GAS-FIRED MAKE-UP AIR UNITS FEATURE:**

- All Accurex indirect gas-fired heaters are certified to the ANSI Z83.8 safety standard
- All blower sizes are tested in our accredited laboratory to ensure accurate fan performance
- Up to 16:1 modulating turndown per furnace / Up to 48:1 total turndown

## MODEL NUMBER CODE:

The Model Number Code is designed to completely identify the unit. The correct code letters must be specified to designate the configurations and size.



## XIGX

Model XIGX is a modular design that offers broad configuration flexibility and higher capacities. Model XIGX is ideally suited for indirect gas-fired make-up air applications where a direct gas-fired system is not appropriate. The XIGX has a modular design for broad configuration flexibility. In addition to 100% outdoor air operation, variable volume airflow options are available. Airflow volumes range from 800 to 15,000 cfm (1,359 to 25,485 m³/hr) with heating capacities up to 1,200,000 MBTU/hr (input).

**COOLING OPTIONS:**

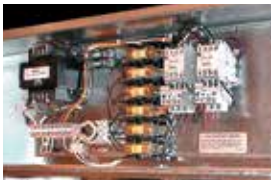
- Evaporative cooling up to 14,000 cfm (23,786 m³/hr)
- Chilled water or DX cooling up to 11,000 cfm (18,689 m³/hr)
- Packaged DX cooling up to 7500 cfm and 16 tons

## Standard Construction Features

**ACCUREX INDIRECT GAS-FIRED MAKE-UP AIR UNITS FEATURE:**

- Power vented with pre- and post-purge cycle
- ETL Listed to ANSI standard Z83.8 and CGA 2.6
- 80% thermal efficiency
- Up to 16:1 modulating turndown performance / up to 41:1 total turndown
- Aluminized steel or stainless steel heat exchanger
- Direct spark ignition system
- Easy access burner controls
- Insulated double wall construction

### CONTROL CENTER



The control center includes the following standard components:

- Magnetic motor starter with solid state overload protection
- Control transformer with fusing
- Disconnect switch
- Separately fused motor
- Distribution terminal strip

Premium grade control components are selected to provide you with years of reliable operation. All electrical components are UL Listed, Recognized or Classified and factory prewired for single point power connection.

### VIBRATION ISOLATORS

The entire fan and motor assembly is mounted on neoprene vibration isolators to minimize noise transmission into the building.

### FILTERS

Filter options include MERV 8, MERV 13, or 2-inch washable aluminum mesh filters.

### INTEGRATED DOWNTURN PLENUM

The unique indirect furnace design includes an integrated downturned plenum, eliminating the need for an additional section to achieve a downblast discharge.

### DURABLE CONSTRUCTION

Designed for maximum weather resistance, housings are constructed of 18-gauge G90 galvanized steel. Insulated double wall construction and lifting lugs are standard.

### RELIABLE FAN PERFORMANCE

Air performance ratings from The Accurex accredited test chamber ensure accurate data. Double-width, double inlet forward-curved wheels for low sound levels are constructed of heavy-gauge steel. Wheels are statically balanced to ensure vibration-free operation.

### ACCESS PANELS

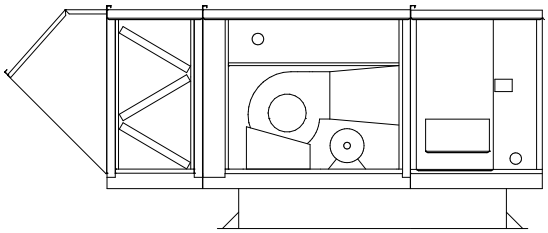
Large access panels are provided for easy inspection and maintenance of motors, drives, fan wheels, filters, and heater controls.

### FACTORY WIRED AND TESTED

All units are tested prior to shipment to ensure a high level of quality. Units are checked for proper fan, furnace and controls operation.

**DOWNBLAST OR HORIZONTAL DISCHARGE**

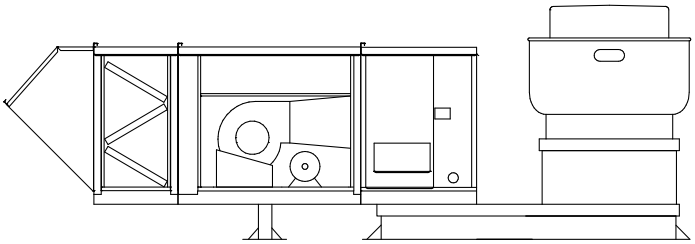
Model XIGX is available in either downblast (arrangement DB) or horizontal (arrangement HZ) discharge. The furnace design features an integrated downturned plenum, eliminating the need for an additional section to achieve a downblast discharge.



*Downblast Discharge - Arrangement DB*

**KITCHEN COMBINATION PACKAGE**

The Accurex combination package simplifies installation and reduces field labor costs for kitchen ventilation systems. The pre-engineered design ensures that the supply fan, exhaust fan, curb and combination extension components interface properly. Equally important, Accurex combination packages are specifically designed to comply with NFPA 96.



*Combination Package - Arrangement DBC*

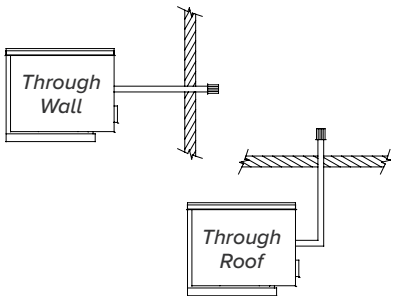
*Note: Consult local codes and the authority having jurisdiction if there are questions concerning the use of this product.*

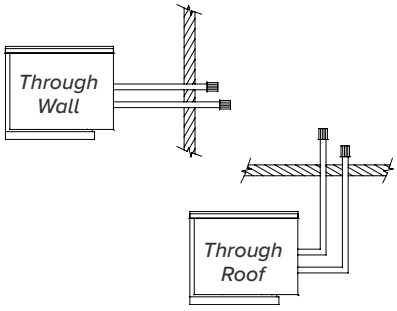
NFPA 96 states:

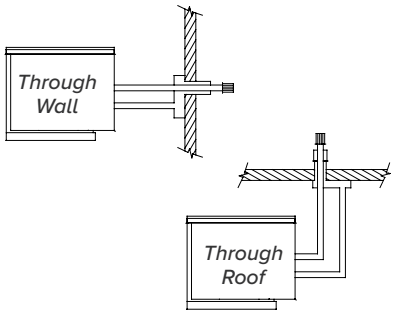
- Exhaust duct must terminate at least 24 inches above the roof deck
- Fan discharge must be at least 40 inches above the roof deck
- Air intake shall have a horizontal separation of 10 feet from the exhaust discharge

## Indoor Venting Options

When your application calls for indoor installation, Accurex offers multiple venting options:




**BASIC INDOOR VENTING**

Indoor air is used for combustion. Combustion by-products vent outdoors through a vent line.

**SEPARATE 2-PIPE VENTING**

Outdoor air is used for combustion. Combustion by-products vent outdoors through a vent line. Requires one opening for each line.

**CONCENTRIC VENTING**

Outdoor air is used for combustion. Combustion by-products vent outdoors through a vent line. Only one opening is needed.

# Cooling Options

### COOLING COILS

Both chilled water and direct expansion coils for split systems are available. The cooling section includes the cooling coil, drain pan, and insulated double-wall construction. Chilled water and direct expansion cooling coils are available with the following features:

- Airflow capacity up to 11,700 cfm
- Various coil depths and circuiting options to meet a wide variety of cooling applications
- Insulated double-sloped stainless steel drain pan for positive draining
- Coils constructed with copper tubes mechanically bonded to aluminum fins. Coil performance is rated in accordance with AHRI 410
- Condensate drain, overflow, and coil connections are stubbed through the wall of the unit
- Optional ElectroFin® coil coating

### EVAPORATIVE COOLING

The evaporative cooling section mounts directly to the front of the unit eliminating transition or ductwork. The evaporative cooling section includes the following features:

- Airflow capacity up to 15,000 cfm
- 12-inch media depth producing a minimum 90% cooling effectiveness
- CEDdek® or GLASdek® evaporative cooling media options
- Stainless steel sump and cooling frame around the media
- Painted or galvanized steel housing construction
- Integral louvered intake and 2-inch aluminum mesh filters
- Drain and overflow connections stubbed through the wall of the unit for convenience

The following control options are available:

**RECIRCULATION PUMP:** Includes a pump that recirculates water over the evaporative media and is activated by a call for cooling. A field-adjustable bleed-off valve keeps mineral concentrations low

**AUTO DRAIN AND FLUSH:** Includes a recirculating pump and a field-adjustable time that will periodically flush the sump to minimize mineral build-up. Single Pass - DG-H05

# Furnace Control

Choose from staged or modulating furnace control.

### MODULATING CONTROL – XIGX

| Control | Operation Points* |
|---|---|
| 4:1 Mod. | Anywhere from 25 to 100% |
| 8:1 Mod.+ | Anywhere from 12½ to 100% |
| 16:1 Mod.+ | Anywhere from 6¼ to 100% |

** Percentage of maximum furnace output.*
*+ Multiple furnace units only.*

# Temperature Controls

### DISCHARGE TEMPERATURE CONTROL

Model XIGX controls heat output based on discharge temperature. A factory-mounted discharge temperature sensor feeds information back to the unit control center. The furnace(s) either stage or modulate the heat output to satisfy the discharge temperature set point. The set point is easily field adjustable, using the keypad on the controller, located in the furnace control center. For make-up air applications, single-stage furnace control is not recommended.

### DISCHARGE TEMPERATURE CONTROL WITH ROOM OVERRIDE

The room override option enables a make-up air unit to boost its heat output when the space temperature is cooler than desired. When the space temperature is satisfied, the XIGX will control heat output based on the normal discharge temperature set point. When the space is too cool, the discharge temperature will be elevated, typically by 20°F (-7°C), until the override thermostat is satisfied. Room sensor may be wall/beam mounted or included on a remote control panel.

### DDC INTERFACE

The discharge temperature can be controlled by a DDC signal. The DDC options provides an factory-installed interface, allowing easy integration into your building management system. The discharge temperature can be controlled using a 2-10 VDC or 4-20 mA signal.

## Weatherhoods

### BIRDSCREEN WEATHERHOOD

The birdscreen weatherhood includes a mesh screen that prevents large debris from entering the unit. An additional filter section for smaller debris is required.

### FILTERED WEATHERHOOD

The filter weatherhood includes aluminum mesh filters installed in the weatherhood, eliminating the need for an additional filter section. Redundant filtering is possible with the addition of a filter section to the filtered weatherhood. A filtered weatherhood should be your first choice when a cost competitive solution is needed for your make-up air application. Standard on XIGK.

### LOUVERED WEATHERHOOD

The louvered weatherhood is designed to keep debris and moisture out of the unit and your building in the most compact design possible. This combo weatherhood includes aluminum mesh filters and a moisture-reducing louver to reduce water entering the unit.

## Remote Control Panels

Accurex's fan control center, model XFCC, is designed to control the exhaust fans, supply fans and lights for the kitchen ventilation system. Model XFCC has numerous options and can be interlocked with the fire suppression system.

### DIRTY FILTER SWITCH
Indicates when filters become dirty. An indicator light may be wall/beam mounted or provided with a remote control panel.

### MOTORIZED DAMPERS
Intake or discharge dampers are available to prevent backdrafts when the fan is not in operation. Intake dampers are factory-mounted and wired.

### INLET AIR SENSOR
Inlet air sensor detects ambient temperatures and turns furnace operation on/off during seasons when heating is or is not required.

### 115 VOLT SERVICE RECEPTACLE
A 115 volt GFCI outlet is mounted externally in a NEMA-3R box for the convenience of field service personnel.

### ROOF CURBS
Factory provided roof curbs are available to ensure compatibility between the make-up air unit and roof curb. Standard construction is G90 galvanized steel. See the roof curbs section in this catalog for more information.

### EQUIPMENT SUPPORTS
Factory provided equipment supports may be required in addition to a roof curb, depending on the specified unit configuration. Standard construction is G90 galvanized steel.

### FREEZE PROTECTION
Electronic freeze protection is available to automatically shut down the supply fan when the discharge temperature is below 45°F for an extended amount of time. This prevents the unit from discharging non-tempered air into the building and freezing pipes and other temperature sensitive items.

### SPECIAL COATINGS
Permatector™ powder coating is available if a painted look is desired. Decorative baked enamel coatings are also available in a variety of colors to match existing building fixtures. Consult your Accurex representative for coating selections.

### FIBERGLASS INSULATION
Fiberglass insulation is used to line the housing to prevent the formation of condensation and to form an acoustical barrier.

### VARIABLE FREQUENCY DRIVE
A variable frequency drive is available to automatically vary the fan speed or for easy system balancing.

### PROPANE GAS
A propane heater may be provided in lieu of natural gas.

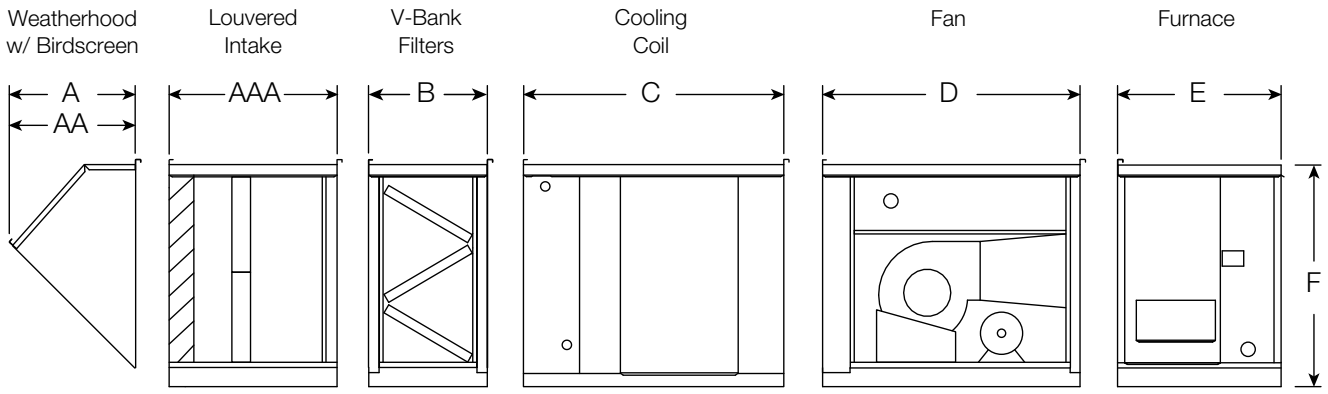
### DUCT ADAPTER
Duct adapter is available with factory supplied curbs and allows an easy method for connecting ductwork to curb.

### DOUBLE WALL CONSTRUCTION
An interior metal liner is available to isolate insulation from the airstream. One inch thick insulation is included with this option.

### GAS PRESSURE REGULATOR
Required if building gas line pressure exceeds the maximum inlet gas pressure of 14 in. wg.

### WEATHERHOOD
A galvanized steel weatherhood with birdscreen is standard on 100% outdoor air units. A louvered intake is optional.

# XIGX Dimensions

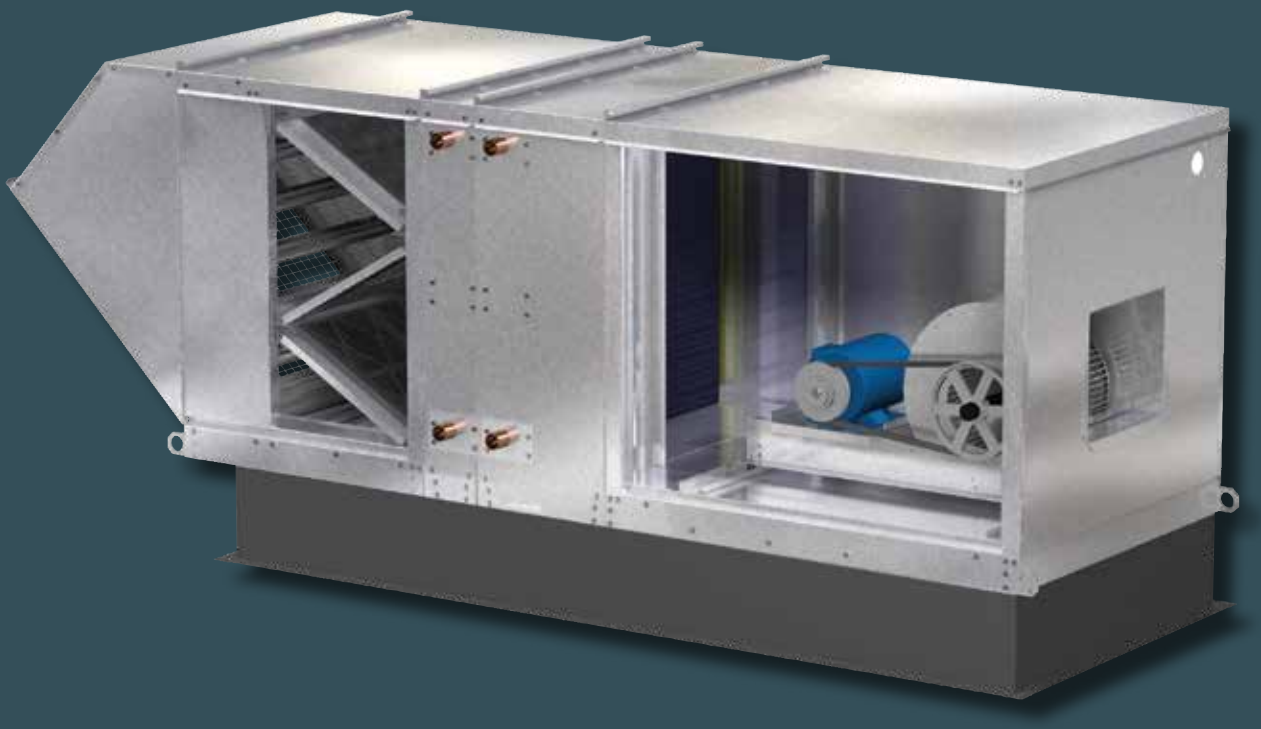



*AA - Filtered Weatherhood

| Housing Size | A | AA | AAA | B | C | | D | Furnace Size | E | F | Width |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | Low | High | | | | | |
| H12 | 29.9 | 31.5 | 13.8 | 21.5 | 30.0 | 50.4 | 42.5 | 100-250 | 33.2 | 39 | 44.6 |
| H22 | 45.6 | 47.1 | 16.9 | 24.0 | 30.0 | 69.4 | 52.2 | 150-300 | 33.2 | 44.9 | 44.6 |
| | | | | | | | | 350-400 | | | 53.9 |
| | | | | | | | | 500-600 | 66.4 | | 44.6 |
| H32 | 47.3 | 48.7 | 16.9 | 25.8 | 98.0 | | 66 | 350-400 | 33.2 | 48.7 | 52.2 |
| | | | | | | | | 500-800 | 66.4 | | |
| | | | | | | | | 1050-1200 | 99.6 | | |

*All dimensions in inches.*

# Modular Supply Units



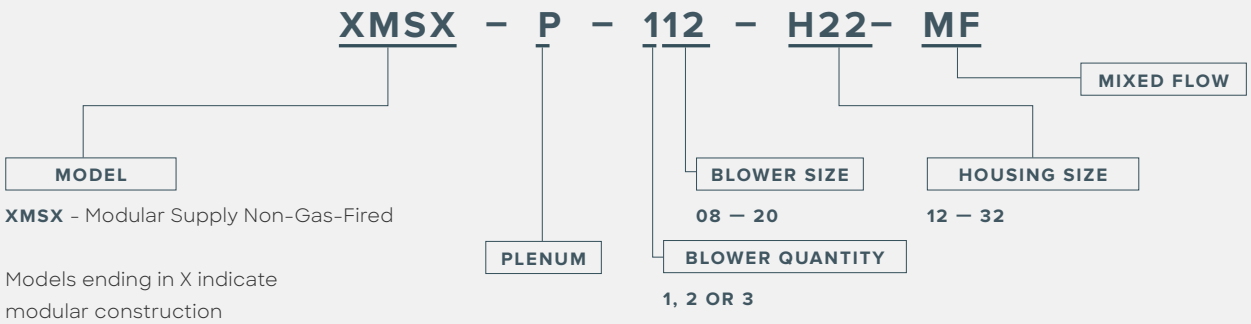
ACCUREX

Accurex non-gas-fired units are designed to provide fresh make-up air to restaurants and other foodservice facilities where natural or propane gas is either not available or not desired for heating. The Accurex model XMSX utilizes coil heating and/or cooling tempering options for high performance operation. Seven available blower sizes provide airflow capacities up to 15,000 cfm (25,485 m³/hr) and static pressure capabilities up to 2.0 in. wg (497 Pa). All blower sizes are tested in the Accurex accredited laboratory to ensure accurate fan performance.

Electric heating coils with SCR control, hot water, and/or steam heating, provide efficient heating in any climate when gas-fired equipment is not an option. Chilled water, direct expansion, and evaporative coolers provide cooling when required. XMSX housings incorporate a flexible design, and are constructed of durable G90 galvanized steel suitable for indoor or outdoor installations. Accurex XMSX make-up air units are available with a wide range of construction and control accessories for maximum flexibility and performance.

## MODEL NUMBER CODE:

The Model Number Code is designed to completely identify the unit. The correct code letters must be specified to designate the configurations and size.



Model XMSX is ideally suited for make-up air applications where hot water, steam or electric heat is desired. The XMSX has a modular design for broad configuration flexibility. In addition to 100% outdoor air operation, recirculation and variable volume airflow options are available.

Airflow volumes range from 800 to 15,000 cfm (1,359 to 25,485 m³/hr). These units feature belt driven, double-width, forward-curved fans, vibration isolation, intake filters, and a variety of heating and cooling options.

### HEATING OPTIONS:

- No heat up to 15,000 cfm (25,485 m³/hr)
- Hot water up to 15,000 cfm (25,485 m³/hr)
- Steam up to 15,000 cfm (25,485 m³/hr)
- Electric heat up to 15,000 cfm (25,485 m³/hr)

### COOLING OPTIONS:

- Evaporative cooling up to 15,000 cfm (76,455 m³/hr)
- Chilled water or DX cooling up to 11,700 cfm (19,900 m³/hr)

### RELIABLE FAN PERFORMANCE

The plenum fan options include the mixed flow or backward inclined fan, where aluminum or steel wheels provide high efficiency and low sound output. Wheels are balanced to ensure vibration-free operation.

### CONTROL CENTER (OPTIONAL)

The control center includes the following standard components:

- Magnetic motor starter with solid-state overload protection
- Control transformer with fusing
- Disconnect switch
- Individual motor fusing
- Distribution terminal strip

Premium grade control components are selected for reliable operation. All electrical components are UL Listed, Recognized or Classified and factory prewired for single point power connection.

### VIBRATION ISOLATORS

The entire fan and motor assembly is mounted on vibration isolators to minimize noise transmission to the building.

### DURABLE CONSTRUCTION

Designed for maximum weather resistance, XMSX housings are constructed of heavy-gauge G90 galvanized steel. Lifting lugs are standard.

### SHAFTS

Shafts are precision turned, ground and polished steel sized so that the first critical speed is at least 25% over the maximum operating speed.

### BEARINGS

Shafts rotate in permanently lubricated, heavy-duty ball bearings.

### ACCESS PANELS

Large access panels are provided for easy inspection and maintenance of motors, drives, fan wheels, filters, and heater controls.

### FACTORY WIRED AND TESTED

All units are tested prior to shipment. Units are checked for proper fan and controls operation.

## Heating Options

**HOT WATER AND STEAM**

Hot water and steam coils are available in either a 100% thru-coil airflow or face and bypass arrangement. Coils have copper tubes with permanently expanded aluminum fins and are tested and rated in accordance with AHRI 410.

**ELECTRIC HEAT**

Electric heaters are UL Listed and feature open coil heating elements. Heater control cabinets are installed completely within the heating section, are factory wired up to 220 kW and meet all requirements of the National Electric Code.

## Cooling Options

**HOT WATER AND STEAM**

The evaporative cooling section includes a galvanized steel housing with a louvered intake, 2-inch aluminum mesh filters and a stainless steel evaporative cooling module. The evaporative cooling media is Munters CELdek or GLASdek and has a depth of 12 inches for 90% cooling effectiveness.

The entire section mounts directly to the front of the XMSX unit, eliminating transition or ductwork by others. Drain and overflow are conveniently tapped through the side of the cooling section. The supply line connection is field located where convenient. Freeze protection and automatic drain and fill options are also available.

Airflow capacity for evaporative cooling is up to 15,000 cfm (25,485 $m^3/hr$). The evaporative cooling section for the housing size 32 and 35 ships separately.

**COOLING COILS**

Chilled water or direct expansion (DX) cooling is available with the model XMSX. The cooling section includes the cooling coil, sloped stainless steel drain pan and insulated double wall construction. Drain and coil connections are stubbed through the wall for convenience.

For proper coil sizing, contact your local representative. Four-row and six-row chilled water or DX coils are available with airflow capacities up to 11,700 cfm (19,900 $m^3/hr$).

Cooling coil sections are installed upstream of the fan section for a draw through arrangement and provide a streamlined transition to adjacent XMSX sections. DX coils require remote condensing units.

### DIRTY FILTER SWITCH

The air filter sensor indicates when filters become dirty. An indicator light may be wall/beam mounted or provided with a remote control panel.

### MOTORIZED DAMPERS

Intake or discharge dampers are available to prevent backdrafts when the fan is not in operation. Intake dampers are factory-mounted and wired.

### EXHAUST FAN STARTER

Exhaust fan starters may be added to the control center.

### 115 VOLT GFCI SERVICE RECEPTACLE

A 115 volt GFCI outlet is mounted externally in a NEMA-3R box for the convenience of field service personnel. A separate 115 volt power source is required.

### ROOF CURBS

Factory provided roof curbs are available to ensure compatibility between make-up air unit and roof curb. Standard construction is G90 galvanized steel. See the roof curbs section in this catalog for more information.

### SMOKE DETECTOR

Photoelectric smoke detector is available for duct mounting.

### FREEZE PROTECTION

Electronic freeze protection is available to automatically shut down the supply fan when the discharge temperature is below 45°F for an extended amount of time. This prevents the unit from discharging non-tempered air into the building and freezing pipes and other temperature sensitive items.

### EQUIPMENT SUPPORTS

Factory provided equipment supports may be required in addition to a roof curb, depending on the specified unit configuration. Standard construction is G90 galvanized steel.

### SPECIAL COATINGS

Permatector™ powder coating is available if a painted look is desired. Decorative baked enamel coatings are also available in a variety of colors to match existing building fixtures. Consult your Accurex representative for coating selections.

### FIBERGLASS INSULATION

Fiberglass insulation is used to line the housing to prevent the formation of condensation and to form an acoustical barrier.

### WEATHERHOOD

A galvanized steel weatherhood with birdscreen is available.

### DUCT ADAPTER

Duct adapter is available with factory supplied curbs and allows an easy method for connecting ductwork to curb.

### DOUBLE WALL CONSTRUCTION

An interior metal liner is available to isolate insulation from the airstream. One inch thick insulation is included with this option.

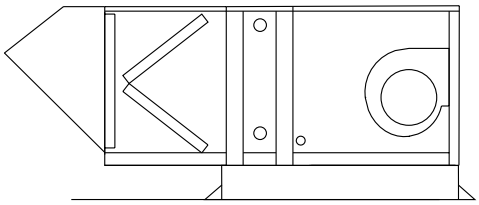
### VARIABLE FREQUENCY DRIVE

A variable frequency drive is available to automatically vary the fan speed.

# Arrangements

**DOWNBLAST OR HORIZONTAL DISCHARGE**

Model XMSX is available in either downblast (arrangement DB) or horizontal (arrangement HZ) discharge.



*Horizontal Discharge - Arrangement HZ*

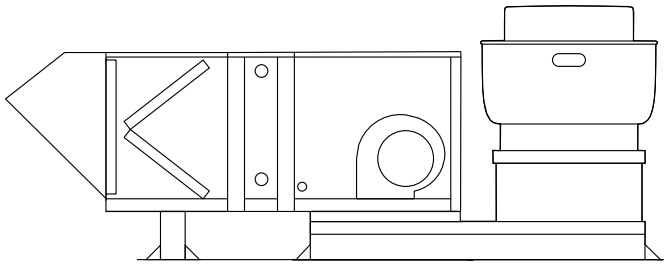
**KITCHEN COMBINATION PACKAGE**

The Accurex combination package simplifies installation and reduces field labor costs for kitchen ventilation systems. The pre-engineered design ensures that the supply fan, exhaust fan, curb and combination extension components interface properly.

Equally important, Accurex combination packages are specifically designed to comply with NFPA 96.

NFPA 96 states:

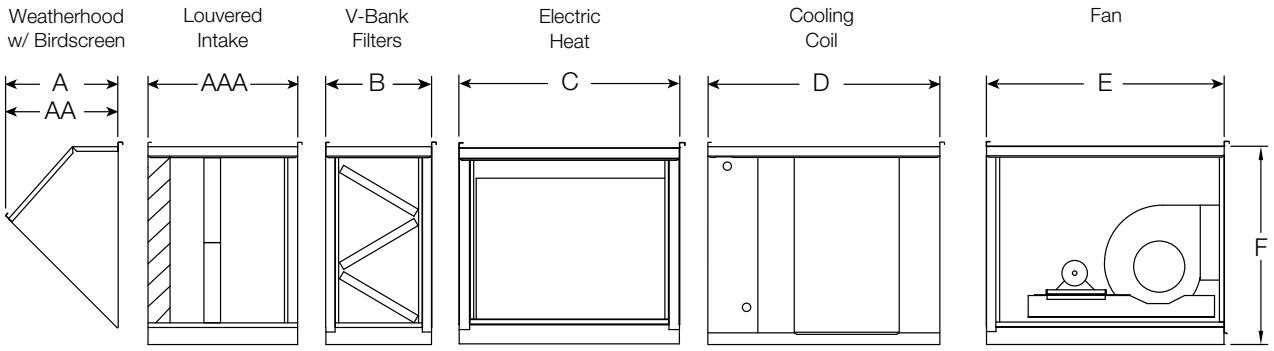
- Exhaust duct must terminate at least 24 inches above the roof deck
- Fan discharge must be at least 40 inches above the roof deck
- Air intake shall have a horizontal separation of 10 feet from the exhaust discharge



*Combination Package - Arrangement DBC*

*Note: Consult local codes and the authority having jurisdiction if there are questions concerning the use of this product.*

# XMSX Dimensions



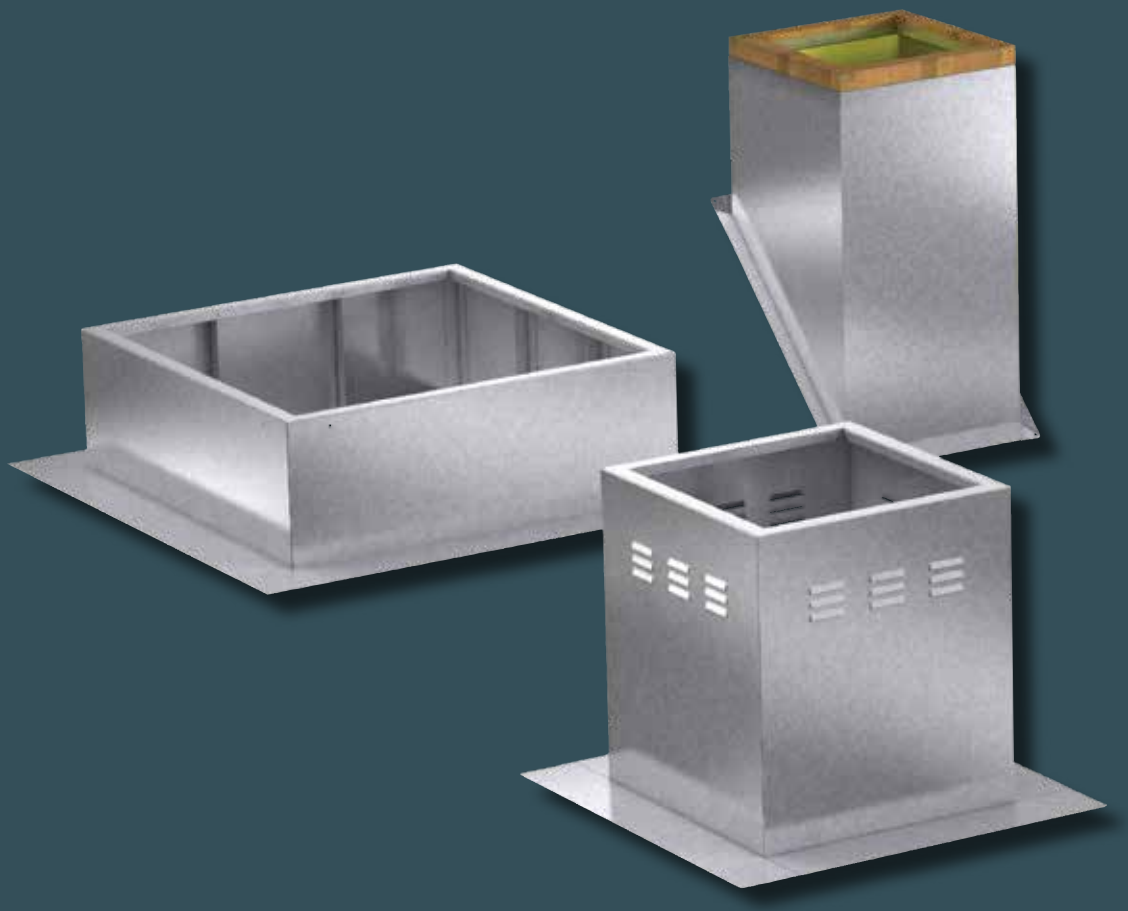

*AA - Filtered Weatherhood

| Housing Size | A | AA | AAA | B | C | D | | E | F | Width |
|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | Low | High | | | |
| H12 | 29.9 | 31.5 | 13.8 | 21.5 | 43.9 | 30 | 50.4 | 42.5 | 39.0 | 33.6 |
| H22 | 45.6 | 47.1 | 16.9 | 24.0 | | 30 | 69.4 | 52.2 | 44.9 | 44.1 |
| H32 | 47.3 | 48.7 | 16.9 | 25.8 | 48.0 | 98.0 | | 66.0 | 48.7 | 53.1 |

*All dimensions in inches.*

| Housing Size | Max kW |
|---|---|
| H12 | 70 |
| H22 | 140 |
| H32 | 220 |

# Roof Curbs



Accurex offers prefabricated roof curbs, which reduce installation time and costs by ensuring compatibility between the unit, curb and roof opening. A wide variety of roof curbs are available, including: flanged, straight-sided, canted, pitched, and ridged. Extensions are also available and can provide an accessible mounting location for dampers.

## MODEL NUMBER CODE:

The Model Number Code is designed to completely identify the unit. The correct code letters must be specified to designate the configurations and size.

### SQUARE CURBS

**GPI R - 34 - 24 - G 12**

**CURB MODEL**
**GPI**-Wood Nailer, Insulated, Straight-Sided
**GPS**-Wood Nailer, Canted, Insulated

**ROOF TYPE**
**P**-Pitched
**R**-Ridged

**NOMINAL CURB SIZE**
(Unit curb cap)

**OPTIONAL DAMPER TRAY SIZE**

**MATERIAL**
**A**-Aluminum
**G**-Galvanized

**CURB HEIGHT (IN.)**

### RECTANGULAR CURBS

**GPI P - 30 X 42 - 22 X 34 - A 12**

**CURB MODEL**
**GPI**-Wood Nailer, Insulated, Straight-Sided
**GPS**-Wood Nailer, Canted, Insulated

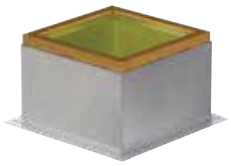
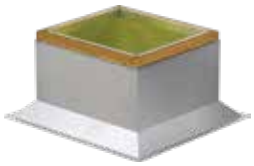
**ROOF TYPE**
**P**-Pitched
**R**-Ridged

**NOMINAL CURB SIZE**
(Unit curb cap)

**OPTIONAL DAMPER TRAY SIZE**

**MATERIAL**
**A**-Aluminum
**G**-Galvanized

**CURB HEIGHT (IN.)**

| Roof Curb | Roof Type/ Application | Description | Model and Service |
|---|---|---|---|
|  | Flat, insulated or non-insulated roof decks | Welded, straight-sided construction with rigid fiberglass insulation and 2-inch mounting flange.<br>These curbs are designed for roof decks that are covered with 2 to 6 inches of insulation. Models GPI and GPIP are standard with fully welded construction, wood nailer, 1-inch insulation and 2-inch flashing flange. Model GPI is for use on flat roofs and GPIP for pitched roofs. Models are available in heights of 12 to 24 inches. | GPI - Galvanized 12-inch high, with or without damper tray, square sizes for stock fans |
|  | Flat, pitched or ridged, insulated or non-insulated roof decks | | GPI - Aluminum or galvanized, other heights, non-stock square and rectangular sizes |
|  | Flat, non-insulated roof decks | Welded, canted construction with rigid fiberglass insulation.<br>This curb is designed for use on flat, non-insulated roof decks. It consists of a fully welded body and 1-inch of insulation. | GPS - All types, sized to meet your requirements |
| **Adapters** | | | |
|  | Adaptors/ Reducers | Used to match new fans to existing roof curbs. Welded galvanized steel or aluminum. | Curb Adaptors and Reducers |
| **Equipment Supports** | | | |
|  | Insulated and non-insulated roof decks | Welded aluminum or galvanized steel. Available in heights of 8, 12 and 14 inches and widths of 4, 6 and 8 inches. | GESS - All types, sized to meet your requirements |

*For complete product information contact your local Accurex representative.*

ACCUREX

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# Can simplicity in kitchen ventilation be taken too far?

## We'll let you know.

At Accurex®, we believe working with kitchen ventilation systems should be one of the easiest parts of designing and building commercial kitchens. So we do more than engineer and manufacture advanced, energy-efficient systems. We make it easy for you to specify Accurex products, by simplifying the process, being responsive and getting you information quickly. Discover how simple works, at **ACCUREX.COM**


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