Cumberland®

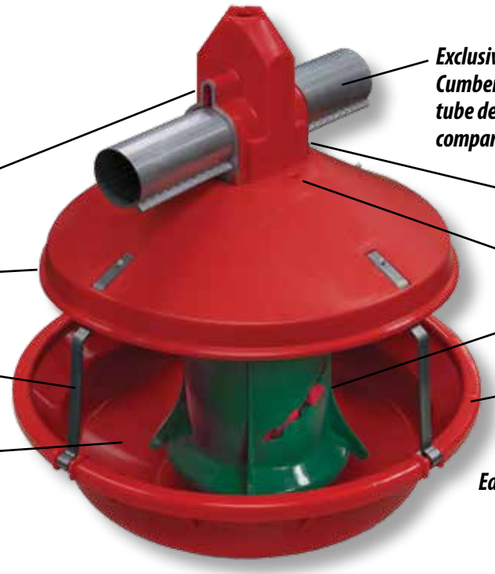
# COMPLETE TURKEY

AGCO

# TURKEY PAN FEEDING

Cumberland's Turkey Pan Feeders combine rugged designs and innovative features for enhanced performance and years of reliable service.

## *"NEW"* Adult Turkey Feeder



*Robust drop tube with built in shocker wire support and wear plates for added longevity*

*Durable heavy duty shields*

*Cumberland's 4-hook support strap design provides rigid support between the shield and pan*

*Feed-saving deep "V" bottom pans and steep-inward swept lips*

*Exclusive to the adult turkey feeding industry, Cumberland offers a heavy duty, 2" ribbed tube design which provides added strength compared to the traditional seamless tubing.*

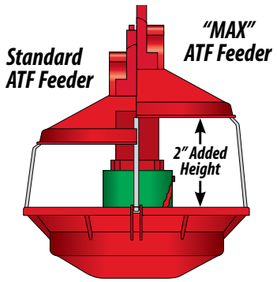
*Free swinging design*

*Easy installation of flood winch cables*

*User friendly feed level adjustment*

*Available with galvanized steel pan and red or green plastic pan*

*Easy cleaning between flocks*

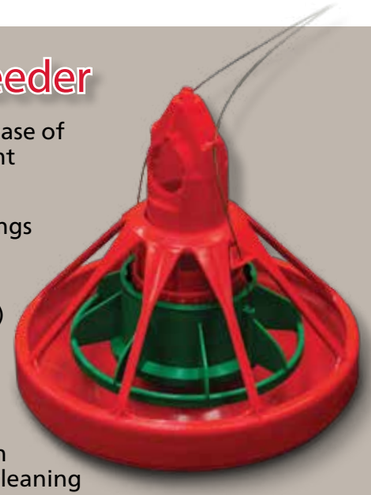



## "Max" Adult Turkey Feeder

The "Max" Turkey Feeder inherits all the same benefits of the Cumberland Adult Turkey Feeder and these additional features:

- A longer support strap hook design providing a larger area between the shield and pan for easier access to feed.
- Feed line tube height increases two inches, which will improve bird movement throughout the house.

## Turkey Poult Feeder



- Two piece drop tube for ease of installation or replacement
- Winchable feed level and numerous feed level settings
- Feed saver lip
- For use on 1-3/4" (44 mm) tube
- Durable construction design for longevity
- Simple removal of the pan from the feeder for easy cleaning

An **INNER RING** helps prohibit bird entrance into the feeder reducing shavings within the feed.

**FEEDER RESTRICTOR RINGS** throughout the line are easily raised and lowered to a desired level using an innovative, multiple setting, locking tab winch.



Cumberland's *i-plus3 Control Pan Line* utilizes Infrared Technology to sense and detect the level of feed in the control pan for proper and reliable operation, day in and day out. *Infrared Technology* requires no moving parts or sensitivity adjustments.


Patent Pending

Intertek
*Certification applies to controls*

- Easy installation
- Low maintenance
- Easy to use with no moving parts or sensitivity adjustments
- Reliable feed sensing technology that promotes full pans and healthy birds to maximize feed conversions

*As the i-plus3 ATF Control Pan fills, the infrared beams detect the feed level.*

*When the feed level breaks all three of the infrared sensors, the auger will stop automatically.*

*When the feed drops below the infrared sensors, the auger will re-start automatically after a 60 second delay.*

*The i-plus3 control pans are also available in the "MAX" and turkey poult models.*

## *Built tough for the rugged environment.*

Our **NEW LINE OF FEEDING MOTORS** are reliable, powerful, built to last and offer end users an overall better value for their dollar. These 50/60 hertz motors come with a *two year warranty* and feature improved starter switches which enhance reliability and longevity. Bleed resistors have been added to all motors with capacitors to reduce heat buildup for frequent start applications. An industry proven centrifugal actuator design has been incorporated into all single phase motors.

# *It Just Makes Sense!*

The ***IR-Plus***™ is specially designed to work hand and hand with Cumberland's ***Flex-Flo***™ feed delivery system and ***i-plus3*** Control Pan. This combination of dependable Cumberland products provide gentle feed handling, full hoppers and feed pans that will result in maximum feed efficiency.

With no moving parts or sensitivity adjustments, the ***IR-Plus***™ ensures the feed level switch is activated every time. When the feed level drops below the sensors and the user defined time delay has elapsed, the fill system will start, bringing feed to the desired hopper.


***U.S. Patent 8,056,506***

- Adjustable time delay prevents the fill system from short cycling, extending motor and auger life
- Infrared sensors accurately detect feed flow to shut fill systems off when the hopper is full
- No moving parts or sensitivity adjustments for low maintenance, accurate feed levels every time
- Easy installation and retrofitable, adapts to nearly all flexible auger systems

## *Additional Feed System Accessories*

Light, durable, fully galvanized **FEED LINE HOPPERS** are available in 120, 200, 300 and 400 lb. capacity.

***Standard Hopper Suspension***

***Optional Feed Hopper Rotation Suspension Kit***

**STANDARD HOPPER SUSPENSION** allows removal of the feed hopper without affecting the feed line suspension when raising the feed lines for clean out and normal maintenance that might occur between flocks. The optional **FEED HOPPER ROTATION SUSPENSION KITS** can be easily installed on existing or new feed lines allowing the feed hopper to rotate 90 degrees without removing the feed hopper.

Heavy fabricated, galvanized, **SINGLE AND DOUBLE OUTLET BOOTS** are available for end or center house feeding applications.

The rib on Cumberland's **LOCK FORMED TUBING** gives added strength to the tube, as well as providing a solid way to hold the pans in place. The auger is manufactured from pre-flattened wire to reduce material stress and provide for a more consistent, high quality product.


The **SENS-O-MATIC II FEED HOPPER SWITCH** has proven to be a reliable way to regulate your feed delivery. An optional adjustable bracket kit allows the Sens-O-Matic to be conveniently adjusted to proper operation height.

Traditional **MICRO SWITCHES, PROXIMITY HOPPER LEVEL CONTROLS** and **FLEX-FLO HOPPER LEVEL CONTROL SWITCHES** are available to regulate feed delivery.



# Radiant Tube Heat

Allowing heat to be radiated directly to the birds allows them to find their own comfort zone either closer to, or farther away from, the heater. This reduces stress and creates an environment that allows for better bird performance.

## *Heavy Duty control and burner unit, using outside air for combustion.*

The unique two stage burner adapts to varying conditions providing a more consistent comfort zone with fewer off cycles. Units operate at low fire the majority of the time for improved energy efficiency. High fire mode provides reserve heating capability when conditions require.

## Patented Two-Stage Burner

- ***Two-Stage Technology***
- ***Fuel savings***
- ***Faster heat loss recoveries***
- ***Improved comfort levels***
- ***Reduction in equipment cycles***
- ***Design protection benefits***


Infra-red heat emulates the true efficiency of the sun. It generates energy that is converted into heat when absorbed by objects like floors and animals. The energy is then re-radiated to warm the surrounding area by convection. This is the most efficient method of heating many poultry facilities.

Intertek

*The Super-Saver and Tube Heaters are available in CE Certified models.*

## RADIANT TUBE AG-1 OR AG-2 HEATER FEATURES

- 16 ga. aluminized combustion chamber - (1st 10')
- Turbulator baffle for maximum efficiency
- 4" overlapping slip-fit tube connections
- High efficiency polished aluminum reflectors
- Two mounting options: center or side mount
- Solid state silicon carbide ignition system
- Unique anti-rattle reflector springs
- 24" PVC coated stainless steel flex connector
- Ignitor changeable without tools
- Bolted tube clamps
- 2 x 4 electrical junction box
- Air inlet collar standard
- 100% enclosed components
- 1/2" gas cock provided
- Reflector end caps

## DISTRIBUTE HEAT MORE UNIFORMLY

AV Series heaters utilize separate upper and lower tube temperatures and a series of reflectors to distribute heat more uniformly throughout the building, creating and even comfort zone for birds.

AV SERIES Tube Brooder

The AV Series upper combustion tubes contain the flame and operate at higher temperatures. Each tube has its own reflector allowing the hotter upper combustion tubes to concentrate more energy to the perimeter of the heating pattern.



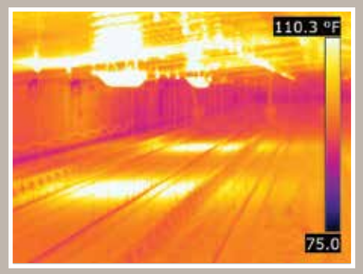
The lower tubes are designed to distribute a lesser radiant energy resulting in reduced hot spots directly under the units and more uniform floor temperatures across the house. The U-bend at the end of the heaters have a separate end reflector directing the energy outwards, allowing optimum uniformity between units.

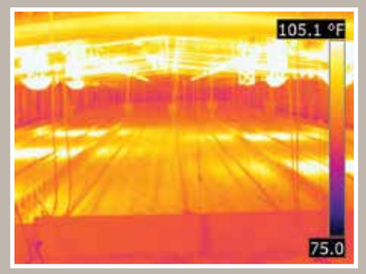
***The AV Series Tube Brooder uses four tubes mounted in a V-Shaped pattern to direct the heat where it's most needed.***

- No exposed flame to be effected by air flow or environment
- Totally enclosed electronics and burner system
- The highly polished aluminum reflectors allow optimum heat pattern for best uniformity
- Offered with Dual Stage Technology to maximize fuel efficiencies
- Low pressure system eliminates need for high pressure gas lines inside house
- Minimal assembly required
- Fresh air intake kit (attic version) with 4"x29" duct pipe, intake cap, chain hanging kit, and exhaust flapper cap are standard with each heater.
- Indicator lights display if unit is in low or high fire at a glance
- Easily access key components through an end service panel without having to remove the heater from suspension chains.
- Single Stage BTU: 80,000, Dual Stage BTU: 50,000 - 80,000
- Option to direct vent
- Option to duct fresh air to unit to ensure clean combustion and reduce maintenance

"Yes, I have, and would recommend the AV Heater. Setup and cleaning is really easy and I believe it gives great poult health and livability."

***Scott Sunderland***
***Turkey Grower - Moroni, Utah***




Heat from an AV Series Heater distributes heat more uniformly throughout the building, creating an even comfort zone for birds. (House pictured is 66' wide)

***AV Series Heat Distribution - Infrared photos courtesy of Auburn University, National Poultry Technology Center***

## AV SERIES SPECIFICATIONS

| | | | | |
|---|---|---|---|---|
| **Heating Capacity (Maximum per Hour)** | | | | |
| *Direct Spark Ignition (3 Tries Before Lockout)* | | | *80,000 BTU* | *20,160 Kcal* |
| **Maximum Gas Consumption** | | | | |
| *LP* | | | *.87 gph* | *3.29 l/h* |
| Natural Gas | | | 75.5 cfh | 2.14 m3/h |
| **Gas Pressure Requirements (Measured on Pressure Tap on Valve with Unit Running)** | | | | |
| *LP* | *Minimum* | *11.0" wc* | *Maximum* | *14.0" wc* |
| *NG* | *Minimum* | *5.0" wc* | *Maximum* | *14.0" wc* |
| **Heater Size & Weight Information** | | | | |
| *Weight Per Complete Unit* | | | *103 lbs.* | *47 kg* |
| *Shipping Dimensions - Burner Box 31.5"L x 17.25"W x 16.125"T , Tube Box 91L x 31W x 14H* | | | | |
| *Installed Dimensions (LxWxH)* | | | *107"x25.5"x13"* | *272x65x33 (cm)* |
| **Installation Guidelines** | | | | |
| *Minimum Height from Floor (Measure from Floor to Bottom of Unit)* | | | *6 - 9 Feet* | *1.8 - 2.7 Meters* |
| *Space Between Heaters* | | | *40 - 60 Feet* | *12.2 - 18.3 Meters* |
| **Minimum Clearance to Combustibles** | | | | |
| *Sides of Heater* | | | *36"* | *91 cm* |
| *Above Heater* | | | *10"* | *25 cm* |
| *Below Heater* | | | *40"* | *102 cm* |
| **Electrical Requirements** | | | | |
| *AVD (Dual Stage) - 120v 60Hz GRD, 3 wire, 24vac thermostat connection* | | | | |
| *AVS (Single Stage) -120v 60Hz GRD, 3 wire* | | | | |
| *Starting Current - 1.5 amps* | | | | |
| *Running Current - 1.1 amps* | | | | |
| **Sensor Location Specifications** | | | | |

* Sensor should be placed over the feed or drinker line.

* Sensor should be no more than 12' to the side from the center of the unit and 10' length wise from the end of the unit.

# SUPER-SAVER XL HEATERS

- 250,000 BTU pilot light model features manual modulating valve (150,000 – 250,000 BTU's)
- Hot surface & direct spark models available in 40,000 to 250,000 BTU
- High temp aluminized steel burn chamber
- Side swing door for easy access and maintenance
- Diagnostic lights for troubleshooting ease
- Standard adjustable "Y" heat deflector
- 1/3 HP totally enclosed thermally protected motor with sealed bearings
- Available in 120 & 240 volt models.
- 1/10 HP on all 40,000 – 75,000 BTU models
- Standard ½" gas cock installed at gas valve
- Back-up safety sail switch
- High limit safety switch (manual reset)
- On/Off toggle switch
- Stainless steel, high altitude & CE certified models* available
- Service-Saver enclosed control box

Intertek



The **"SERVICE-SAVER"** enclosed electrical control unit is sealed from debris such as dust and moisture and is accessible through a side swinging door making the unit easily field serviceable.

A side swinging door design gives **EASY ACCESS** to internal components like the "Super-Saver" control unit and blower motor, making it one of the easiest to service heaters on the market.

The **ELECTRONIC HSI IGNITION** is standard on all models. The heating chamber is made of high temp aluminized steel for superior rust protection. The cast iron burner is enamel dipped to eliminate dust adhesion and rust. The air intake surround increases combustion and heat change efficiency.

*The outside mount model is a forced air heater complete with all relevant installation hardware.*

*The inside mount model is a gas circulating heater ideal for a confinement environment.*

*Super-Saver pilot heaters available.*

| *Super-Saver XL Minimum Clearances* | |
|---|---|
| Ceiling | 12" (305mm) |
| Wall | 12" (305 mm) |
| Floor | 20" (508 mm) |

Heater must be positioned such that livestock and combustible materials are unable to come in contact with the heater or within 10 feet (3 meters) of the hot air discharge.

## SUPER-SAVER XL SPECIFICATIONS

| Model# | Maximum Input | Ventilation | Voltage | Amps |
|---|---|---|---|---|
| SS-40-XL | 40,000 BTUH (11.7kWh) | 500 CFM (849.5 $m^3$/hr) | 120 Volts | 2.5 Amps |
| SS-75-XL | 75,000 BTUH (21.9kWh) | 500 CFM (849.5 $m^3$/hr) | 120 Volts | 2.5 Amps |
| HH-SS-120-XL | 120,000 BTUH (35.2kWh) | 1000 CFM (1699 $m^3$/hr) | 120 Volts | 4.8 Amps |
| HH-SS-175-XL | 175,000 BTUH (36.6kWh) | 1000 CFM (1699 $m^3$/hr) | 120 Volts | 4.8 Amps |
| HH-SS-200-XL | 200,000 BTUH (58.6kWh) | 1000 CFM (1699 $m^3$/hr) | 120 Volts | 4.8 Amps |
| HH-SS-225-XL* | 225,000 BTUH (65.9kWh) | 1000 CFM (1699 $m^3$/hr) | 120 Volts | 4.8 Amps |
| HH-SS-250-XL | 250,000 BTUH (73.3kWh) | 1200 CFM (2039 $m^3$/hr) | 120 Volts | 6.0 Amps |

*CE certified available in the HH-SS-225-XL Model

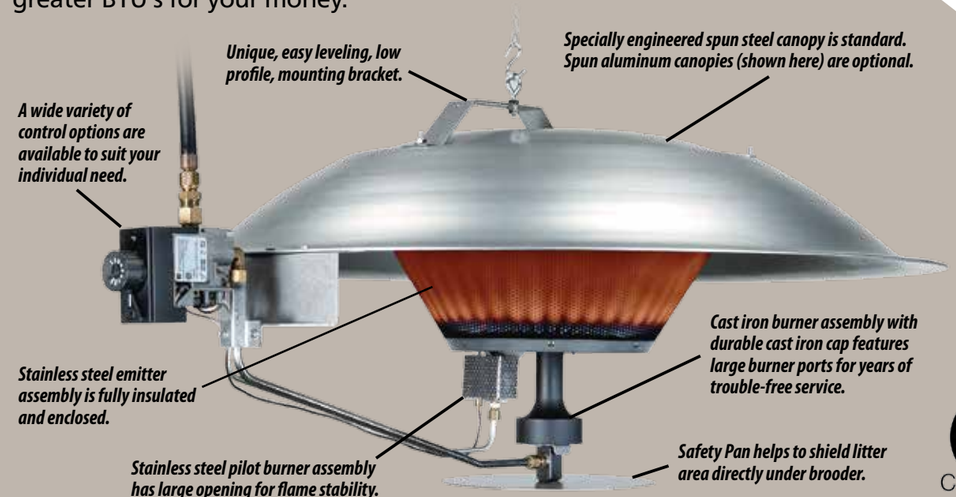
**LP/Propane Gas**
Maximum 14 in. W.C. (34.8 mbar) and minimum 12.5 in. W.C. (31.1 mbar) inlet gas supply pressure acceptable at gas regulator connection. Burner manifold pressure of 11 in. W.C. (27.4 mbar) at maximum input. Gas pressure should be checked by a certified gas technician while heater is in operation.

**Natural Gas**
Maximum 14 in. W.C. (34.8 mbar) and minimum 5 in. W.C. (12.5 mbar) inlet gas supply pressure acceptable at gas regulator connection. Burner manifold pressure of 3.5 in. W.C. (8.7 mbar) at maximum input. Gas pressure should be checked by a certified gas technician while heater is in operation.



# RADIANT BROODER

A consistent, stress-free environment promotes healthier, more productive animals. Radiant heaters provide a consistent, clean-burning and fuel-efficient source of warmth for all types of poultry houses. With near 100% efficiency, and liquid propane or natural gas compatibility, the thermostat controlled Radiant Brooder uses less energy to yield greater BTU's for your money.




## BROODER CONTROL OPTIONS

### ZONE CONTROL RADIANT BROODER

For single or multi-zone installations using central or multiple thermostats. This 24 volt AC zone type control can also operate on 12 volt DC as backup if desired. The gas valve includes a built-in regulator. A 24 volt power supply is required. Brooder can be operated by 24 volt thermostat, computer or environmental controller. 100% gas safety shut-off valve.

### MODULATING RADIANT BROODER

A modulating type HI/LO control with integral thermostat. No electrical supply is needed. Upon call for heat, valve will open from pilot to low fire and modulate between low and high fire as necessary to maintain desired temperature setting. When thermostat has been satisfied, valve will modulate down to low fire and then drop to pilot. 100% gas safety shut-off valve.

### NON-MODULATING RADIANT BROODER

An individual, non-electric and fully automatic On/Off control with integral thermostat which operates on millivolts generated by the pilot — no electrical supply needed. Integral thermostat features a wide temperature range for easy adjustment. 100% gas safety shut-off valve.

### DIRECT SPARK IGNITION

A 24 VAC direct spark ignition system. No pilot light saves fuel and maintenance costs.

## RADIANT BROODER SPECIFICATIONS

| | | | |
|---|---|---|---|
| Input Rating (LP or NAT) | | 40,000 BTU/HR | 11.72 kw |
| Gas Supply Pressure | LP<br>Natural | 12-14" w.c.<br>6-14" w.c. | 30-35mbar<br>15-35 mbar |
| Mounting Height | | 60-72" | 1520-1830mm |
| Brooder Spacing | | 25-40' | 7.6-12.2 m |
| Brooder Size | Canopy Diameter | 35" | 890 mm |
| Weight | | 23 lbs. | 10.5 kg |
| Ventilation Required | Per Brooder | 200 CFM | 340 $m^3$/hr |
| Gas Consumption | LP<br>Natural | .43 GPH<br>.40 THERM | 4.63 l/hr<br>42.2 MJ/hr |
| Minimum Clearance to Combustibles | Side<br>Top<br>Below | 36"<br>18"<br>48" | 915 mm<br>460 mm<br>1220 mm |

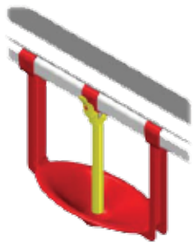
Cumberland's durable **THERMOSTAT** ensures accurate, automatic operation and are moveable for your convenience.

The **ZONE CONTROL PANEL** allows you to control up to 30 brooders from one place. It also features a battery backup, four fused zone connections and one thermostat.

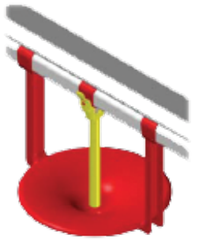
# WATERING HAS NEVER BEEN EASIER

The EasyLine™ Nipple Drinking System promotes large healthy birds and dry floors with its innovative cup design and optimal water delivery. The recipe for success is simple, an Easyline Nipple Drinking System, then just add water.

At the heart of the system are the **PATENTED PENDULUM AND TURKEY NIPPLE.** As the birds drink from the cup, their heads move the pendulum from side to side, thus triggering the nipple. The valve in the nipple opens and water flows through the pendulum into the cup. When the drinking system is at the proper height, the feathers on the neck of the bird will keep the edge of the cups clean.



The **EASYLINE CUP FOR BROOD AND HEN FINISHING** is designed to deliver the proper amount of water to the birds from day one through every stage of their life. Water is delivered into the cup by means of the pendulum. The size of the oval cup provides easy access to the young poults and is designed to keep the litter dry during grow-out.



The **EASYLINE CUP FOR TOM FINISHING** is designed to handle the aggressive behavior of larger birds. An optimal supply of water is provided to the cup through the pendulum. The design of this cup is larger in diameter to help reduce the possibility of water spillage and improve litter conditions through out the building.

***Pressure Regulator***

The **PRESSURE REGULATOR** has built-in flushing capabilities with the simple twist of a knob. Water pressure is easily adjusted with the regulator knob located underneath the unit. The clear flexible standpipe with float ball offers accurate and precise water pressure adjustment.

***Flush Breather Unit***

The **FLUSH BREATHER UNIT** incorporates a clear flexible standpipe and float ball for establishing an accurate water pressure adjustment and also includes hose attachments for automatic flushing and cleaning.

***A Starter Ball is used for turkey poults to help them move the pendulum from side to side.***

Sturdy **SHOCKWIRE PROTECTION UNIT** includes 1.5 mm vz wire cable, tension spring, tension jack, rope clamps insulators, hardware and four additional Hangar per drinking elements.

***The EasyLine System offers the following benefits over conventional watering systems:***

- Fresher supply of water to the birds
- Better litter conditions
- Improved air quality
- Healthier birds
- Higher liveability rates

**RECOMMENDED NUMBER OF BIRDS/NIPPLE**

Brooding: 30-40
Tom finishing: approx. 20
Hen finishing: 25-30

**VERSIONS OF 10’ SECTIONS**

Brooding or Hen Finishing: 3, 4, 5, and 6 drinkers/section

**VERSIONS OF 10’ SECTIONS**

Tom Finishing: 3, 4, and 5 drinkers/section

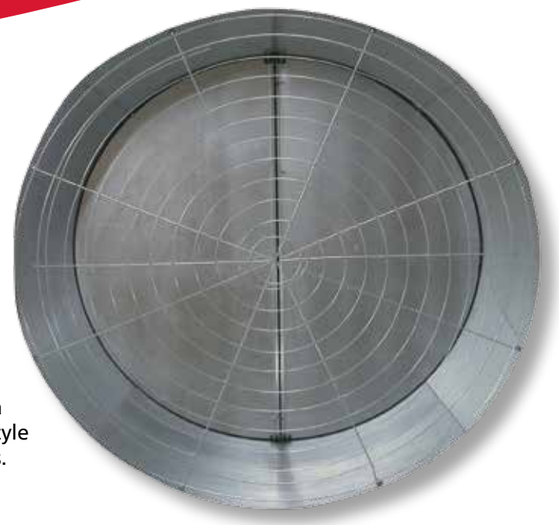
# GALVANIZED STEEL FANS

A main contributor to high bird stress and low bird weight is an overheated or poorly ventilated poultry house. Even if your building is well ventilated, inefficient equipment can blow healthy bird profits right out the window. Cumberland ventilation systems are the perfect solution.

## 50" & 54" BUTTERFLY FANS

The **BUTTERFLY FAN** eliminates the need for the traditional louver shutter which are prone to dust buildup. During fan operation, the air forces the shutter doors open to provide full fan performance.

- Simple Butterfly style shutter structure improves fan performance and stability.
- Uses a magnetic shutter panel ring to alleviate movement of shutter doors while not in operation. In turn, the sealing area is reduced 50% or more compared to the traditional louver style shutter, resulting in lower heating cost during winter months.
- Easy to assemble, flangeless cone panels.



**ARCHED SIDE CONE PANELS** allow Cumberland fans to be mounted closer together on field installations.

Easy access **DRIVE TRAINS** come standard with all belt drive fans. Large, cast iron, high quality greasable pillow block bearings are used for longer life. Large pulleys allow for longer belt life and smooth operation. An automatic belt tensioner ensures proper belt tension.

Front shutter doors offer **PROTECTION FROM HARSH WEATHER CONDITIONS** such as wind and moisture while the fan is not in use.



***Cumberland fans offer superior airflow and reliable performance.***

Cumberland offers **36" AND 50" SLANTWALL FANS** in belt drive and direct drive models to efficiently and effectively maintain optimal environmental conditions. All galvanized fans are constructed of heavy gauge, G-90 grade galvanized steel and use totally enclosed "TEAO" motors designed for high efficiency and continuous duty cycles. Galvanized fan propellers are aerodynamically balanced for maximum air flow.

**OPTIONAL DISCHARGE CONES** can boost fan output by as much as 10-15%, greatly increasing efficiency. Made of all galvanized steel, cones are available in easy to ship and assemble four-piece segments for 36" & 50" models.

Cumberland **DIRECT DRIVE OR BELT DRIVE BOX FANS** feature heavy duty galvanized steel housings, grill guards, venturis and propellers. Box fans are available in 36" (14" and 19" depth) or 50" (21" and 25" depth) diameters.

Factory assembled, pre-wired, **20" CIRCULATION FANS** are available for light air movement. These highly efficient 20" fans include 1/10 HP "TEAO" motors and galvanized props for whisper quiet operation. Other features include PVC coated guards for durability and multi-application hanging bracket.

*2-Bladed Circulation Fan*

*3-Bladed Circulation Fan*

***Choose from our long-standing, 3-bladed fan with standard grill spacing, or economical 2-bladed fan, with a wider spaced grill.***

# FIBERGLASS FANS

Cumberland's fiberglass ventilation fans are manufactured using a "Resin Transfer Molding" (RTM) process for a smooth finish on both interior and exterior surfaces of the fan housing. The basic fan includes a heavy vinyl coated guard, PVC shutter, and all aluminum and stainless steel mounting hardware.

When the design team at Cumberland was given the challenge of developing the **PERFORMER SERIES** fan line, three points were paramount. Performance, efficiency, and longevity all needed to be maintained while keeping the price as competitive as possible. You will find the Performer Series ventilation fans have not only met, but exceeded those goals.

***36" and 50" Performer Series fiberglass models available with and without cones.***

**COMPOSITE PROPELLERS** are made of a tough composite fiberglass. Engineered with a true airfoil design, these propellers increase the overall efficiency of the fan providing optimum airflow effectiveness. **DRIVE SHAFTS** of 1" material allow for large, cast iron, greasable pillow block bearings to be used for longer life. Large pulleys allow for longer belt life and smoother operation.

Cumberland's **COMPETITOR SERIES** fans are the airflow champions. Available in up to 54" models, harnessed with high efficiency motors, and capable of moving up to 30,000 cubic feet of air per minute, Competitor series fans are another powerful tool to help you compete in today's world marketplace.

***Features include a 1.5 HP single phase motor or a 1.75 HP three phase motor, easy belt access, fiberglass housing and cone, and stainless steel hardware.***

The belt driven 54" competitor series fans offer an **AUTOMATIC BELT TENSIONER** providing smooth operation and constant belt tension. Like all Cumberland belt drive fiberglass fans, cast iron pulleys and greasable pillow block bearings are standard features.





# LOW MAINTENANCE SHUTTERS

Cumberland shutters can provide an easy and affordable means of controlling incoming light and building climate. **PVC SHUTTERS** come in white or black, and are very low maintenance and easy to clean. **GALVANIZED SHUTTERS** have galvanized frames, with epoxy painted blades to reduce rusting, allow easy cleaning and provide additional protection. **ALUMINUM SHUTTERS** offer great durability in any environment.

Available in a variety of sizes and materials, we have a **FAN SHUTTER** to fit your particular requirements be it low light, low maintenance or low cost. The true airfoil design of our shutter blades make them extremely effective allowing for very little performance loss.

## GALVANIZED FAN PERFORMANCE VALUES

| | | | | | 0.0 Static Pressure | | .05 Static Pressure | | .10 Static Pressure | | BESS Lab |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | Dia. | Drive | Type | HP | CFM | CFM/Watt | CFM | CFM/Watt | CFM | CFM/Watt | Test # |
| G50CBF16GA | 50" | Belt | Butterfly | 1.5 | 25238 | 27.4 | 23524 | 24 | 21807 | 20.8 | 4309 |
| G50CBF16GAHE | 50" | Belt | Butterfly | 1.5 | 23915 | 30.2 | 22131 | 25.9 | 19937 | 22.1 | 4310 |
| G50CBF16GAHF | 50" | Belt | Butterfly | 1.5 | 26913 | 24.2 | 25427 | 21.5 | 23603 | 18.9 | 4308 |
| G54CBF16GA | 54" | Belt | Butterfly | 1.5 | - | - | * 31800 | 22.6 | 29450 | 19.8 | 6218 |
| G54CBF16GAE | 54" | Belt | Butterfly | 1.5 | - | - | 27500 | 25.9 | 24720 | 21.7 | 6223 |
| G54CBF16GAU | 54" | Belt | Butterfly | 1.5 | - | - | 25000 | 28.8 | 21850 | 23.3 | 6222 |
| CGSB36 | 36" | Belt | Slantwall | 0.5 | 10578 | 19 | 9984 | 17.1 | 9379 | 15.5 | 98273 |
| G50SL16GA | 50" | Belt | Slantwall | 1 | 22373 | 18.6 | 21042 | 17 | 19595 | 15.5 | 98283 |
| CGSD36 | 36" | Direct | Slantwall | 0.5 | 10417 | 17.5 | 9747 | 15.8 | 9105 | 14.2 | 94-0015 |
| CGSD50 | 50" | Direct | Slantwall | 1.25 | 20400 | 19.2 | 19300 | 17.5 | 18100 | 15.8 | 94328 |
| CGBB3614 | 36" | Belt | Box | 0.5 | 10171 | 19.6 | 9615 | 17.8 | 8969 | 15.8 | 00128 |
| CGBB5021 | 50" | Belt | Box | 1 | 20861 | 20.9 | 19486 | 19.1 | 18071 | 17.4 | 94276 |
| CGBD3614 | 36" | Direct | Box | 0.5 | 10950 | 19.3 | 10280 | 17.7 | 9560 | 16 | 94131 |
| CGBD5021 | 50" | Direct | Box | 1.25 | 20450 | 1909 | 19200 | 17.8 | 17910 | 15.9 | 94283 |
| CGSBC36 | 36" | Belt | SW Cone | 0.5 | 11341 | 20.9 | 10653 | 18.4 | 9898 | 16.4 | 98275 |
| G50SCL16GA | 50" | Belt | SW Cone | 1 | 24700 | 22.5 | 23100 | 20 | 21500 | 17.7 | 3168 |
| G54SCL16GA | 54" | Belt | SW Cone | 1.5 | 28900 | 27.1 | 26700 | 23.6 | 24300 | 20.4 | - |
| G54SCL16GHF | 54" | Belt | SW Cone | 1.5 | 30856 | 24.0 | 29184 | 21.3 | 27185 | 18.8 | - |

* Performance values of this fan at .05" static pressure exceeds the BESS Lab test capabilities and were calculated through regression analysis of CFM and CFM/Watt measurements.

## FIBERGLASS FAN PERFORMANCE VALUES

| | | | | | 0.0 Static Pressure | | .05 Static Pressure | | .10 Static Pressure | | BESS Lab |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Model | Dia. | Drive | Cone | HP | CFM | CFM/Watt | CFM | CFM/Watt | CFM | CFM/Watt | Test # |
| APPB-36 | 36" | Belt | No | 0.5 | 10952 | 16.1 | 10152 | 15.4 | 9339 | 14 | - |
| APPB-36C | 36" | Belt | Yes | 0.5 | 11232 | 18.2 | 10905 | 17.5 | 10135 | 15.8 | - |
| APPB-50 | 50" | Belt | No | 1 | 21508 | 17.6 | 20160 | 15.7 | 18707 | 14.4 | - |
| APPB-50C | 50" | Belt | Yes | 1 | 24282 | 23.4 | 22760 | 21 | 21129 | 19 | 01251 |
| CS54C1-P | 54" | Belt | Yes | 1.75 | 32125 | - | 30044 | 20.2 | 28157 | 18.3 | - |

Protect the health of your investment with a properly controlled curtain system. Cumberland's curtain machines deliver powerful performance and reliable operation with durable components to withstand a rigorous environment.


*A plastic water resistant junction box is accessible from the outside of the curtain controller.*

## CURTAIN CONTROLLER

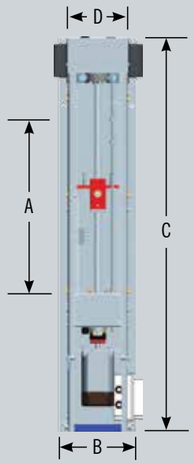
Cumberland's Curtain Controller is a screw driven automated curtain machine with a heavy duty 15, 30 or 60 RPM motor. Multi-directional, frame mounted, header pulleys and latch out assembly come standard.

*The drive block assembly features a removable nylon insert in a heavy-duty cast iron drive block simplifying cable/chain installation and ease of maintenance. This design also decreases friction and provides wear characteristics superior to conventional brass drive blocks. UHMW polyethylene guide wheels insure smooth travel, proper alignment and stability.*

*Solid construction and rust resistant materials make the sprocket controller a reliable workhorse year after year.*

*The Curtain Controller utilizes a threaded block and drive screw directly coupled to a direct drive gear motor.*

*Isolated primary and secondary limit switches allow for backup protection.*




| Model | H. P. | Voltage | Frequency | AMP Draw | Travel Speed | RPM |
|---|---|---|---|---|---|---|
| 15 RPM Curtain Controller | 1/12 | 115V | 60 Hz | 1.0 Amps | 3" per minute | 15 |
| 30 RPM Curtain Controller | 1/8 | 115/220V | 50/60 Hz | 1.7 Amps | 6" per minute | 30 |
| 60 RPM Curtain Controller | 1/6 | 115V | 60 Hz | 1.8 Amps | 12" per minute | 60 |
| A.T. Newell | 1/2 | 115V | 60 Hz | 6.0 Amps | 3" per minute | 1725 |

| Curtain Commander Length | "A" Travel | "B" Width | "C" Length | "D" Width Less Flange | Weight |
|---|---|---|---|---|---|
| 24" (61 cm) | 22" (55.9 cm) | 10.2" (25.9 cm) | 52" (132.1 cm) | 9.5" (24.1 cm) | 110 lbs. (49.9 kg.) |
| 36" (91.4 cm) | 34" (86.4 cm) | 10.2" (25.9 cm) | 64" (162.6 cm) | 9.5" (24.1 cm) | 130 lbs. (58.9 kg.) |
| 48" (121.9 cm) | 46" (116.8 cm) | 10.2" (25.9 cm) | 76" (193 cm) | 9.5" (24.1 cm) | 150 lbs. (68.0 kg.) |
| 60" (152.4 cm) | 58" (147.3 cm) | 10.2" (25.9 cm) | 88" (223.5 cm) | 9.5" (24.1 cm) | 160 lbs. (72.6 kg.) |


## POWERTRAK® Vent Machine

Operate attic inlets, vent doors, and other items requiring a 12" or less controlled movement at, or under, a 2,000 lb. capacity with the PowerTrak™ Vent Machine. Designed for a wall or ceiling mounted indoor installation, this machine will provide a more cost effective way to operate your vent inlet applications. The PowerTrak Vent Machine is available in 15 or 30 RPM models and can be ordered in either 120v or 240v single phase units. (Note: 240v units available in 50/60hz)

- *Machine designed specifically for vent inlet applications*
- *15 or 30 RPM - 120v, 60hz, 1ph*
- *30 RPM - 240v - 50/60hz, 1ph*
- *42.5" overall machine length for tight areas or short walls.*
- *Maximum travel length on rod is 12"*
- *Threaded block/drive screw directly coupled to DD gear motor*
- *Hardware included for cable or chain connection*


## POWERTRAK®

With a 5,000 pound capacity, the superior quality and design of the PowerTrak™ linear drive system boasts many performance and durability enhanced features.

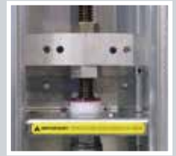
- *Modular construction for ease of service.*
- *Built in head bracket with needle bearing pulleys.*
- *Channel lock "trak-drive" system captures load block.*
- *15% increase in load block support surface for greater life.*
- *Easy adjust spring-cam limit switch system.*
- *Convenient, easily removable, hinged springlock door.*
- *Greater protection from the elements.*
- *Upper and lower auxiliary contact for enhanced Evolution features.*

*Composite load nut offers increased life expectancy over brass.*

*The door hinges from the top of the cabinet on a ceiling mount or can be easily removed on a wall mount for unobstructed access to components.*

*Channel lock "trak-drive" system captures load block*

*Easy adjust spring-cam limit switch system*



Cumberland

**HARDWARE KITS** are available with heavy duty galvanized steel components including sealed needle bearing pulleys, and plated, anti-wrap designed fasteners for ease of installation.

Cumberland's **SIDEWALL VENT DOORS** are used in poultry applications where transitional ventilation is required.

| Part Number | Description | CFM @ .10 SP | Rough Opening |
|---|---|---|---|
| SWI-1700 | Curved Sidewall Vent w/Plastic Door & Galvanized Frame | 2,250 | 10.75" x 41.5" |
| SWI-2000 | Curved Sidewall Vent w/ Plastic Door & Galvanized Frame | 2,550 | 10.5" x 46" |

*The all plastic Curved Sidewall Vent Door directs fresh air into the house along the ceiling toward the peak for gentle air mixing without downdrafts on the birds.*

*Also available in an all galvanized door construction, Cumberland vent doors are simple to install and provide years of optimum circulation.*

# EASY INSTALL ATTIC VENTS

Cumberland's Attic Vent ACI Series is precision engineered to extract solar heat from the attic space so it can be used as a valuable heat source. This unique and innovative design is cost effective, durable and easy to install.

*PVC Plastic Frame*

*Galvanized Frame*

Incorporating all of the same benefits of the ACI-2500 and ACI-4000 Series, Cumberland's PACI-2500 Series vents are pressure actuated and operated by constant force of static pressure controlled springs.

***The Attic Vent System is designed to be retrofit friendly in most drop ceiling poultry houses.***

## ADDITIONAL CUMBERLAND ATTIC VENT BENEFITS:

- **Drier litter**
- **Lower ammonia concentration levels**
- **Better environment for the bird**

| Part Number | Description | Full Open Airflow @ 0.10 SP | Horizontal Airflow @ 0.10 SP | Framed Opening |
|---|---|---|---|---|
| ACI-2500P2 | All Plastic Actuated Ceiling Inlet | 2500 CFM | 1700 CFM | 19" W x 27" L |
| ACI-2500GP2 | Actuated Ceiling Inlet (Galvanized Frame) | 2500 CFM | 1700CFM | 21.5" W x 27" L |
| ACI-4000P2 | All Plastic Actuated Ceiling Inlet | 4000 CFM | 2500 CFM | 19" W x 46.5" L |
| ACI-4000GP2 | Actuated Ceiling Inlet (Galvanized Frame) | 4000 CFM | 2500 CFM | 21.5" W x 46.5" L |
| PACI-2500GP2 | Plastic 2500 Pressure Actuated Attic Vent (Galvanized Frame) | 2100 CFM | 1300 CFM | 21.5"W x 27"L |
| PACI-2500P2 | All Plastic 2500 Pressure Actuated Attic Vent | 2100 CFM | 1300 CFM | 19"W x 27"L |

**CURVED DOOR DESIGN** directs air along the ceiling toward the house walls for gentle air mixing without downdrafts on the birds.

*Mixing warm air from the attic with house air during minimum ventilation reduces fuel consumption as compared to using cold air through sidewall inlets. Fuel savings can vary depending on management, house construction and climate.*



# TUNNEL INLET DOOR SYSTEMS

Tunnel inlets help to eliminate dead zone areas created by curtain sidewalls and curtain pockets. The Inlet Door System comes fully assembled and is a rigid laminate foam panel that is ultra lightweight for easy installation.

With an insulation value of R-8, the **SINGLE DOOR TUNNEL INLET** provides excellent energy savings compared to conventional curtain inlets. Cumberland's single doors are comprised of lightweight rigid laminate foam panels and include a profiled rubber seal for an airtight fit. Single door tunnel inlets are available in 4', 5', & 6' heights and include two color options, black for dark out conditions, and white when dark out conditions are not required.

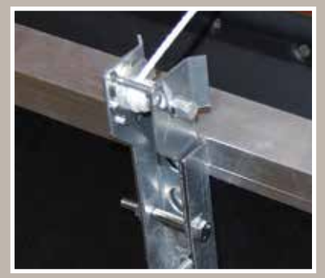
Cumberland's **FORMED RUBBER SEAL** (profile shown right) provides an airtight seal. Molded runners make for easy alignment and quick installation.

## INLET DOOR FEATURES

- Easy Installation
- Lightweight Doors
- Energy Efficiency
- Low Maintenance
- End channels are pre-notched for proper, quick and easy installation
- Offered in 4', 5', & 6' Heights
- Aluminum channels add rigidity to the door panels
- Available in two colors; Black or White
- Fully Assembled

**Over time, cords can stretch requiring tension readjustment. Cumberland's easy adjuster makes insuring a reliable door seal a simple task.**

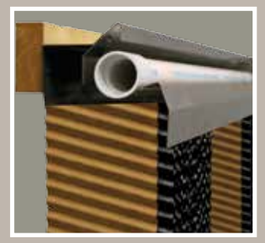
**All brackets are galvanized for durability and long life.**



# EVAPORATIVE COOLING SYSTEMS

Evaporative cooling systems utilize the natural cooling effect of evaporation to combat seasonal dips in production caused by heat stress.

Made of high quality stainless steel or aluminum, the **OPEN TOP SYSTEM** offers the grower easy access to manage and maintain their evaporative cooling system. This systems' design allows you to see the water jets and easily check water pressure. It also offers access to the spray bar for cleaning.



The **CLOSED TOP SYSTEM** is extruded from ultraviolet stabilized PVC for durability and ease of installation. The hinge-open cover and thumbscrews allows accessibility to the spray bar and hold pads firmly in place. The spray bar bracket and water deflector insure pads are uniformly wet.

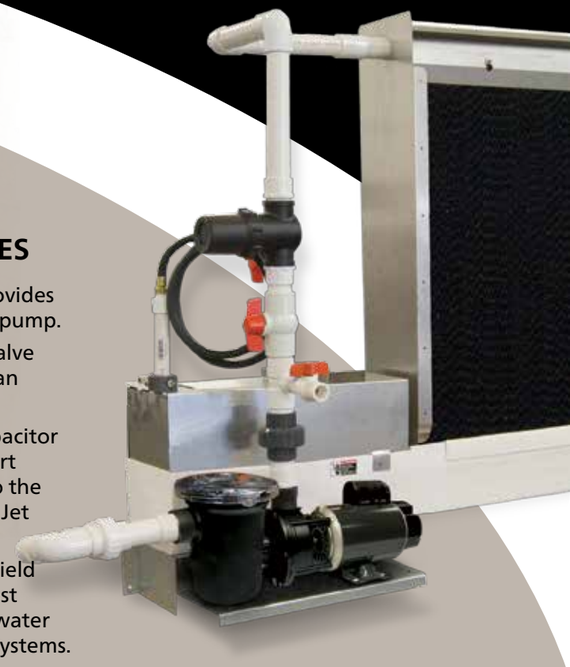
Cumberland's **PRE-FORMED SQUARE TROUGH** serves as a 3 gallon per lineal foot (44.8 liters per meter) water reservoir. Constructed of corrosion proof, ultra-violet stabilized PVC components, the trough allows unevaporated water to be recirculated back to the holding tank. A perforated tray snaps to the trough to hold pads firmly in place. Injection molded end caps and couplers speed installation.





## JET PUMP FEATURES

- The Jet Pump System provides an external self priming pump.
- Trough mounted float valve eliminates the need for an external tank.
- The Permanent Split Capacitor motor eliminates the start switch and will mount to the wet end of any previous Jet Pump kit.
- Our Jet Pump System is field proven, reliable and a cost effective way to deliver water to Evaporative Cooling Systems.



*A roto-molded holding tank offers increased water storage capacity.*

*Center feed and drain kits are available for longer cooling systems.*

## OTHER EVAPORATIVE COOLING SYSTEM FEATURES INCLUDE:

- Submersible pump keeps water levels consistent for efficient water delivery
- Automatic float valve for matching water supply with water demand
- Trough support brackets for suspending the system on a sidewall
- Wide selection of cooling pads
- Easy removal of pads for cleaning

## EVAP COOLING PADS

- Strongest & heaviest pad available
- Produced using the most advanced curing process
- Use the most advanced resin technology
- Superior black diamond edge coating
- Custom sizes from 2' to 6' tall.
- Made in the USA

*Cam-Lock system allows toolless pad installation and replacement.*

*The spray bar bracket and water deflector insure pads are uniformly wet.*

# ROLLSEAL® DOORS

To ensure optimal poultry health, you need to pay careful attention to maintaining the best possible environmental conditions. That means preventing drafts from entering and heat from escaping, making a RollSeal® door the best decision for your operation.

Suitable for any building, new or existing, **RollSeal®** doors are easy to install and operate and provide years of worry-free environmental control. **RollSeal®** creates a barrier that keeps the cold out and the warmth in so you know your investment is protected.

## RS300 MODEL

- Suitable for all poultry applications
- Sizes up to 14' wide by 14' high
- Custom sizing available so you can find the door that fits your needs

## RS400 MODEL

- Ideal for larger applications
- Stronger aluminum channels, drive pipe and larger tension pipes to support longer doors
- Sizes up to 21' wide by 18' high

## OPTIONS INCLUDE:

- Additional switches and remote transmitter/receiver options available
- Fabric and window options
- Fabric color options

## PATENTED TRIPLE - LAYERED EFFICIENCY

Every state-of-the-art **RollSeal®** door features a tough, tear-resistant patented three-ply fabric of inner and outer layers designed with a durable, long-lasting, hook and loop fastener seal. Each layer works together to provide an energy-efficient double seal, ideal for poultry ventilation applications.

- The upper drive shaft roller lifts and lowers the curtain by the central fabric layer
- By pushing the hook into the loop as the curtain is lowered, two offset lower tension roller bars create the side seal
- Tension rollers hold fabric against the floor for a proper seal
- Patented sealing system provides excellent wind load resistance
- Multilayered, high density, woven-polyethylene fabric has two air pockets that provide good thermal insulation



## UNITIZED ROLLSEAL® SYSTEMS

Cumberland's patented Rollseal® Sidewall System is designed to fit the Komfort Kooler Evaporative cooling system with a precision tight fit to limit air infiltration. It utilizes 2 dead air spaces for the best insulating seal and protects cooling pads from inclement weather, dust, UV rays and other harmful environmental elements. Manual and automated drive options are available to best suit your application.

- **SUPERIOR SEAL**
- **3-LAYER PANEL PROTECTION**
- **2 DEAD AIR SPACES TO IMPROVE INSULATION VALUE**
- **PAD/SYSTEM PROTECTION FROM THE ELEMENTS**
- **ADAPTS TO KOMFORT KOOLER IN EITHER THE WALL MOUNT OR DIRECT TO CONCRETE VERSIONS**
- **MULTIPLE DRIVE OPTIONS TO BEST SUIT YOUR APPLICATION**

*Tight Seal*

*Mounting Brackets*

## *Easy Install Easy Operation*

Installation couldn't be easier. Simply attach the strong and lightweight aluminum side channels to the head unit, stand the door upright to the frame, bolt the unit in place and you're done. Once installed, your RollSeal® door is simple to maintain and easy to clean.

When you open a RollSeal® door, you'll see how quick and easy it is for anyone to operate the manual chain hoist or the motor drive.

**POWER DRIVE AVAILABLE IN...**

- 240v 1ph
- 208v 3ph
- 480v 3ph

This product may be protected by one or more of the following patents: US5752557, US5960847, US6138739, US6942001, US7828037, AU712128, BR9611473-8, CA2237302, CN325601, EP1338751, IL124347, JP3772992, MX204223, and NO321285

Cumberland®

## Proven & Dependable™

AGCO Cumberland is a part of GSI, a worldwide brand of AGCO

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