H-SERIES
BELT DRIVE

COOK®

H-SERIES
BELT DRIVE

Hooded Axial Exhaust, Supply and Filtered Supply Roof Ventilators

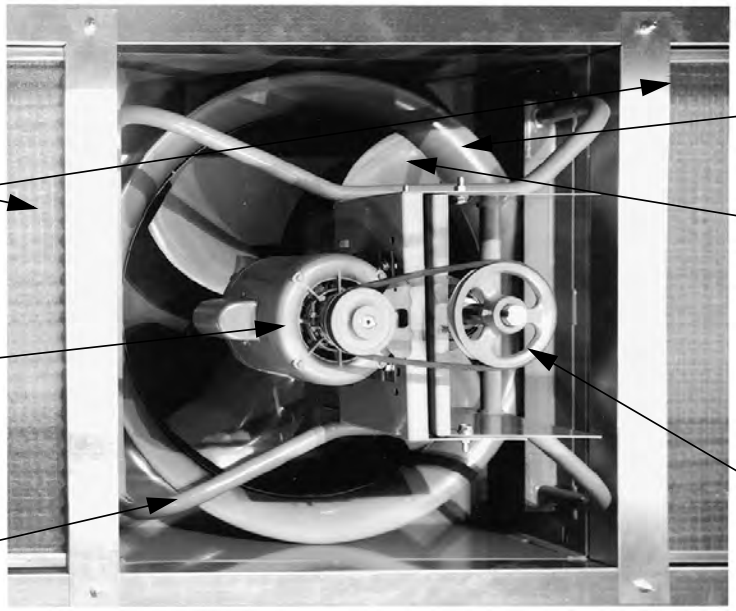
H Series

Loren Cook H Series Propeller Roof Ventilators are designed for industrial or commercial applications requiring a low profile roof top design. The H Series is available in exhaust, supply or filtered supply configurations and utilizes either the *X.STREAM* high efficiency fabricated steel propeller for low and medium pressure applications or an extruded aluminum airfoil propeller for higher pressure applications. The H Series consists of HXE - Hooded *X.STREAM* Exhaust; HXS - Hooded *X.STREAM* Supply; HXF - Hooded *X.STREAM* Filtered; HEE - Hooded Extruded Aluminum Airfoil Exhaust; HES - Hooded Extruded Aluminum Airfoil Supply; HEF - Hooded Extruded Aluminum Airfoil Filtered and HER - Hooded Extruded Aluminum Airfoil Reversible. Models HXE, HXS and HXF are available in sizes 20 inches through 60 inches, with both low and medium pressure props. Models HEE, HES, HEF and HER are available in sizes 24 inches through 60 inches.

H Series

- Fan power assembly is of welded tubular steel construction with a Lorenized® powder coat finish. The minimum 14 gauge steel base features an integral spun venturi and continuously welded curb cap corners.
- Galvanized steel hood features a large removable top cap allowing unobstructed access to the motor, and power assembly without removing the entire hood.
- Exhaust and supply ventilators in sizes 20-36; reversible ventilators in sizes 24-36 and filtered supply ventilators in sizes 20-30 are shipped assembled. Exhaust, supply and reversible ventilators in sizes 36-42 and filtered supply ventilators in sizes 36-60 are shipped with the hood in two sections for easy field assembly.
- Filtered H Series ventilators have two inch washable aluminum filters standard. Fiberglass and Polyester replaceable media filters are available as an option. Aluminum filters meet AGA requirements and are of high efficiency per AF1 test procedures.
- Motors are heavy duty type with permanently lubricated bearings.
- Bearings are designed and tested specifically for use in air handling applications. Bearings are heavy duty regreasable ball type in a pillowblock cast iron housing selected for a minimum L-50 life in excess of 200,000 hours at maximum catalog speed.
- Drives utilize oil and heat resistant, non-static belts and precision machined cast iron sheaves which are keyed and securely attached to the wheel and motor shafts. Drives are sized for 150 percent of motor horsepower.
- The HES, HEE, HEF, HXSL, HXSM, HXFL, and HXFM models are licensed to bear the AMCA Seal for Air Performance. The HXEL and HXEM models are licensed to bear the AMCA Seal for Sound and Air Performance.
- Direct Drive units also available. See H Series Direct Drive Catalog.

Construction Features (HXF shown)



X.STREAM Series Propeller

Cook *X.STREAM* series high efficiency propeller, designed using the latest in computer technology, provides an optimum design for air flow, efficiency, quality and durability in a wide range of performance levels. High pressure capabilities and low noise levels are characteristic of the *X.STREAM* propeller. It is available in both low pressure and medium pressure models for either exhaust or supply in sizes 20 inches through 60 inches.

E Series Extruded Aluminum Airfoil Propeller

Cook E Series extruded aluminum airfoil propeller is designed for use where higher static pressures are required. It is constructed with six aluminum blades mounted in a cast aluminum hub. Pitch settings of the blades are set at the factory and are locked into place by means of a taper lock pin. It is available in diameter sizes from 24 inches to 60 inches with static pressures from 0 inches to 1 inch.

H Series Filter Media Data

Aluminum Media (Standard) - Aluminum washable filter media installed in a two inch frame
Initial Atmospheric Dust Spot Efficiency - < 20 percent Average Atmospheric Dust Spot Efficiency - < 20 percent
Average Synthetic Dust Weight Arrestance - 54 percent

Fiberglass Media (Optional) - Laminated fiberglass replaceable media installed in a two inch frame
Initial Atmospheric Dust Spot Efficiency - < 20 percent Average Atmospheric Dust Spot Efficiency - < 20 percent
Average Synthetic Dust Weight Arrestance - 84 percent

Polyester Media (Optional) - Non-woven polyester replaceable media installed in a 2 inch frame
Initial Atmospheric Dust Spot Efficiency - < 20 percent Average Atmospheric Dust Spot Efficiency - < 20 percent
Average Synthetic Dust Weight Arrestance - 93 percent

Fan Intake Area

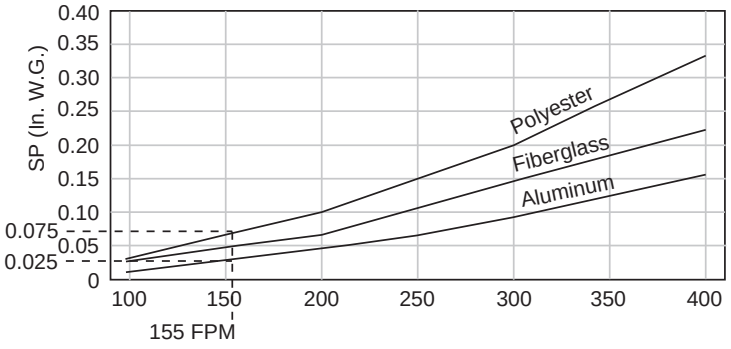
Fan Model (HEF/ HXF)	Intake Area (SF)
20	16.3
24	23.5
30	31.6
36	39.6
42	47.8
48	59.3
54	70.3
60	81.0

Filter Media Pressure Drop

The following information will be helpful in calculating any additional static pressure to add for optional filter media.

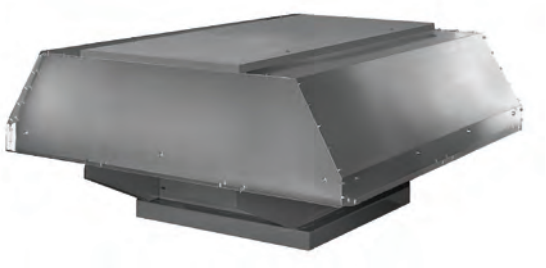
Example:
A size 24 HXF selected for 3640 CFM at 0.125 inch system static pressure utilizing polyester media for superior dust arrestance.

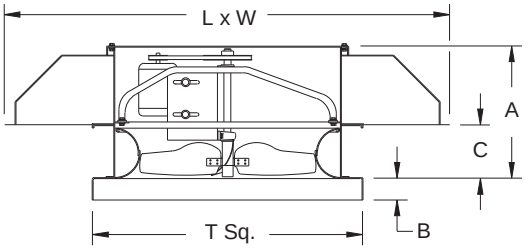
1. CFM/Intake area (SF) = Intake velocity (FPM) 3640 CFM/23.5 SF = 155 FPM.
2. Go into the pressure drop graph and determine the standard static pressure drop with aluminum media as well as the pressure drop for the optional media at intake velocity.
3. Subtract one from the other and add that number to the system static pressure. (In this case, 0.075” - 0.025” = 0.05” SP).
4. Make the selection at the new static pressure point. (In this case, 0.125” + 0.05” = 0.13”).



HXEL, HXEM Specifications and Dimension Data

Low and Medium Pressure Hooded Exhaust Ventilator Steel Propeller Roof Mounted, Belt Drive





Loren Cook Company certifies that the HXEL and HXEM shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and AMCA Publication 311 and comply with the requirements of the AMCA Certified Ratings Program.

Type HXEL and type HXEM are furnished standard with UL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

Type HXEL and type HXEM are furnished standard with $_{C}$UL 705 listing (Power Ventilator) when furnished with factory supplied motor.

Description - Fan shall be a low profile, hooded, roof mounted, belt driven, propeller exhaust ventilator.

Certifications - Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for Sound and air performance..

Construction - Fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The motor, bearings and drives shall be mounted on a tubular steel power assembly. The power assembly shall be rigidly secured to the fan housing. The welded steel fan housing shall include a minimum 14 gauge base with integral spun venturi and continuously welded curb cap corners. Fan shall be enclosed with a minimum 18 gauge galvanized steel hood bolted to the fan housing. The hood shall have a removable top cap to allow unobstructed access to the motor and power assembly. Fan outlet shall be protected from entry of foreign material by a 1/2 inch x 1/2 inch galvanized steel screen. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Coating - All non-galvanized steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

Propeller - Propeller shall be a high-efficiency fabricated steel design with blades securely fastened to a minimum 7 gauge steel hub. The hub shall be keyed and locked to the fan shaft with two set screws. Propeller shall be balanced in accordance with AMCA Standard 204-05, Balance Quality and Vibration Levels for Fans.

Motor - Motor shall be Nema design B with class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

Bearings - Bearings shall be designed and individually tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

Belts and Drives - Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150 percent of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

Product - Fan shall be model HXEL or HXEM as manufactured by Loren Cook Company of Springfield, Missouri.

HXEL, HXEM Dimension Data

Size	A	B	C	L x W	T Sq.	Material Gauge		Max. Motor Frame	Roof Opening Square*	Approx. Ship Wt.-Lbs. less mtr.
						Base	Hood			
20	27-1/4	2	10	52 x 52	32	14	18	145T	27-1/2	400
24	28-3/4	3	10	59 X 59	36	14	18	182T	31-1/2	480
30	30-1/2	3	10	69 X 69	42	14	18	184T	37-1/2	560
36	33	3	10	80 X 80	48	14	18	215T	43-1/2	780
42	38	3	10	90 X 90	54	14	18	215T	49-1/2	1020
48	41-1/2	3	13-1/2	110 X 90	60	14	18	254T	55-1/2	1110
54	44-1/2	3	14-3/4	111 X 109	66	14	18	256T	61-1/2	1235
60	44-1/2	3	14-3/4	121 X 119	72	14	18	256T	67-1/2	1550

All dimensions in inches. *Roof opening size for curbs supplied by Loren Cook Company only.

Low and Medium Pressure Hooded Supply Ventilator Steel Propeller Roof Mounted, Belt Drive

Description - Fan shall be a low profile, hooded, roof mounted, belt driven, propeller supply ventilator.

Certifications - Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for air performance..

Construction - Fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The motor, bearings and drives shall be mounted on a tubular steel power assembly. The power assembly shall be rigidly secured to the fan housing. The welded steel fan housing shall include a minimum 14 gauge base with integral spun venturi and continuously welded curb cap corners. Fan shall be enclosed with a minimum 18 gauge galvanized steel hood bolted to the fan housing. The hood shall have a removable top cap to allow unobstructed access to the motor and power assembly. Fan inlet shall be protected from entry of foreign material by a 1/2 inch x 1/2 inch galvanized steel screen. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Coating - All non-galvanized steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

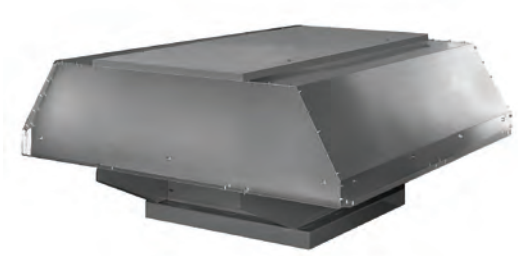
Propeller - Propeller shall be a high-efficiency fabricated steel design with blades securely fastened to a minimum 7 gauge steel hub. The hub shall be keyed and locked to the fan shaft with two set screws. Propeller shall be balanced in accordance with AMCA Standard 204-05, Balance Quality and Vibration Levels for Fans.

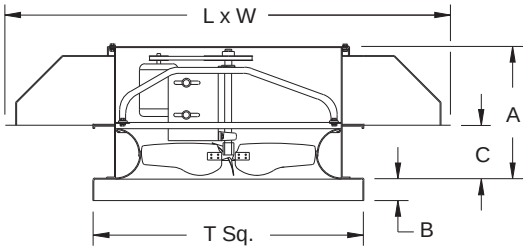
Motor - Motor shall be Nema design B with class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

Bearings - Bearings shall be designed and individually tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

Belts and Drives - Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150 percent of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

Product - Fan shall be model HXSL or HSXM as manufactured by Loren Cook Company of Springfield, Missouri.





Loren Cook Company certifies that the HXSL and HXSM shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

Type HXSL and type HXSM are furnished standard with UL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

Type HXSL and type HXSM are furnished standard with $_{C}$UL 705 listing (Power Ventilator) when furnished with factory supplied motor.

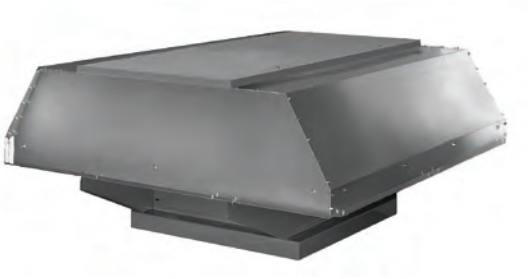
HXSL, HXSM Dimension Data

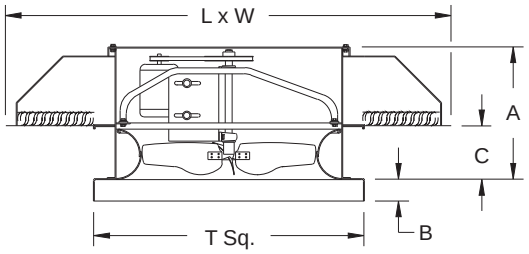
Size	A	B	C	L x W	T Sq.	Material Gauge		Max. Motor Frame	Roof Opening Square*	Approx. Ship Wt.-Lbs. less mtr.
						Base	Hood			
20	27-1/4	2	10	52 X 52	32	14	18	145T	27-1/2	400
24	28-3/4	3	10	59 X 59	36	14	18	182T	31-1/2	480
30	30-1/2	3	10	69 X 69	42	14	18	184T	37-1/2	560
36	33	3	10	80 X 80	48	14	18	215T	43-1/2	780
42	38	3	10	90 X 90	54	14	18	215T	49-1/2	1020
48	41-1/2	3	13-1/2	110 X 90	60	14	18	254T	55-1/2	1110
54	44-1/2	3	14-3/4	111 X 109	66	14	18	256T	61-1/2	1235
60	44-1/2	3	14-3/4	121 X 119	72	14	18	256T	67-1/2	1550

All dimensions in inches. *Roof opening size for curbs supplied by Loren Cook Company only.

HXFL, HXFM Specifications and Dimension Data

Low and Medium Pressure Hooded Filtered Supply Ventilator Steel Propeller Roof Mounted, Belt Drive





Loren Cook Company certifies that the HXFL and HXFM shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

Type HXFL and type HXFM are furnished standard with UL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

Type HXFL and HXFM are furnished standard with cUL 705 listing (Power Ventilator) when furnished with factory supplied motor.

Description - Fan shall be a low profile, hooded, roof mounted, belt driven, filtered propeller supply ventilator.

Certifications - Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for air performance.

Construction - Fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The motor, bearings and drives shall be mounted on a tubular steel power assembly. The power assembly shall be rigidly secured to the fan housing. The welded steel fan housing shall include a minimum 14 gauge base with integral spun venturi and continuously welded curb cap corners. Fan shall be enclosed with a minimum 18 gauge galvanized steel hood bolted to the fan housing. The hood shall have a removable top cap to allow unobstructed access to the motor and power assembly. Filters shall be washable expanded aluminum media with two inch formed aluminum frame. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Coating - All non-galvanized steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

Propeller - Propeller shall be a high-efficiency fabricated steel design with blades securely fastened to a minimum 7 gauge steel hub. The hub shall be keyed and locked to the fan shaft with two set screws. Propeller shall be balanced in accordance with AMCA Standard 204-05, Balance Quality and Vibration Levels for Fans.

Motor - Motor shall be Nema design B with class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

Bearings - Bearings shall be designed and individually tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

Belts and Drives - Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150 percent of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

Product - Fan shall be model HXFL or HXFM as manufactured by Loren Cook Company of Springfield, Missouri.

HXFL, HXFM Dimension Data

Size	A	B	C	L x W	T Sq.	Material Gauge		Max. Motor Frame	Roof Opening Square*	Approx. Ship Wt.-Lbs. less mtr.
						Base	Hood			
20	28-3/4	2	10	59 X 59	32	14	18	145T	27-1/2	450
24	30-1/2	3	10	69 X 69	36	14	18	182T	31-1/2	525
30	33	3	10	80 X 80	42	14	18	184T	37-1/2	610
36	38	3	10	90 X 90	48	14	18	215T	43-1/2	840
42	41-1/2	3	13-1/2	110 X 90	54	14	18	215T	49-1/2	1100
48	44-1/2	3	14-3/4	111 X 109	60	14	18	254T	55-1/2	1200
54	44-1/2	3	14-3/4	121 X 119	66	14	18	256T	61-1/2	1345
60	44-1/2	3	14-3/4	146 x 119	72	14	18	256T	67-1/2	1700

All dimensions in inches. *Roof opening size for curbs supplied by Loren Cook Company only.

Hooded Exhaust Ventilator
Extruded Aluminum
Airfoil Propeller
Roof Mounted, Belt Drive

Description - Fan shall be a hooded, low profile, roof mounted, belt driven, propeller exhaust ventilator.

Certifications - Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for air performance.

Construction - Fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The motor, bearings and drives shall be mounted on a tubular steel power assembly. The power assembly shall be rigidly secured to the fan housing. The welded steel fan housing shall include a minimum 14 gauge base with integral spun venturi and continuously welded curb cap corners. Fan shall be enclosed with a minimum 18 gauge galvanized steel hood bolted to the fan housing. The hood shall have a removable top cap to allow unobstructed access to the motor and power assembly. Fan outlet shall be protected from entry of foreign material by a 1/2 inch x 1/2 inch galvanized steel screen. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Coating - All non-galvanized steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

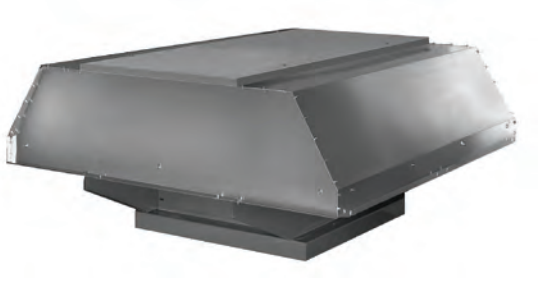
Propeller - Propeller shall be extruded aluminum airfoil design with cast aluminum hub. The blade pitch shall be factory set and locked using set screws and roll pin. The hub shall be keyed and locked to the shaft utilizing two set screws or a taper lock bushing. Propeller shall be balanced in accordance with AMCA Standard 204-05, Balance Quality and Vibration Levels for Fans.

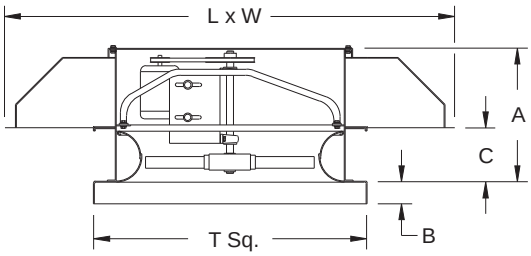
Motor - Motor shall be Nema design B with class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

Bearings - Bearings shall be designed and individually tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

Belts and Drives - Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150 percent of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

Product - Fan shall be model HEE as manufactured by Loren Cook Company of Springfield, Missouri.





Loren Cook Company certifies that the HEE shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

Type HEE are furnished standard with UL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

Type HEE are furnished standard with $_{C}$UL 705 listing (Power Ventilator) when furnished with factory supplied motor.

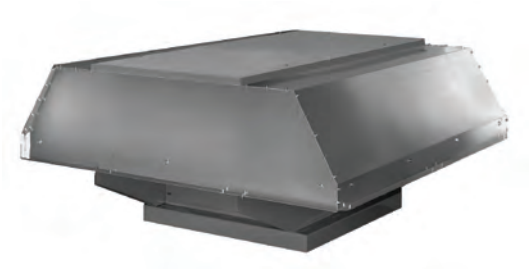
HEE Dimension Data

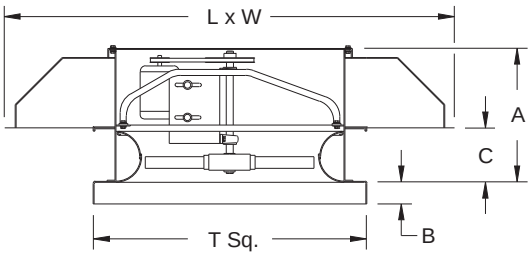
Size	A	B	C	L x W	T Sq.	Material Gauge		Max. Motor Frame	Roof Opening Square*	Approx. Ship Wt.-Lbs. less mtr.
						Base	Hood			
24	28-3/4	3	10	59	36	14	18	182T	31-1/2	480
30	30-1/2	3	10	69	42	14	18	184T	37-1/2	560
36	33	3	10	80	48	14	18	215T	43-1/2	780
42	38	3	10	90	54	14	18	215T	48-1/2	1020
48	41-1/2	3	13-1/2	90 x 110	60	14	18	254T	55-1/2	1110
54	44-1/2	3	14-3/4	111 x 109	66	14	18	256T	61-1/2	1235
60	44-1/2	3	14-3/4	121 x 119	72	14	18	256T	67-1/2	1550

All dimensions in inches. *Roof opening size for curbs supplied by Loren Cook Company only.

HES Specifications and Dimension Data

Hooded Supply Ventilator
Extruded Aluminum
Airfoil Propeller
Roof Mounted, Belt Drive





Loren Cook Company certifies that the HES shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

Type HES are furnished standard with UL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

Type HES are furnished standard with $_{C}$UL 705 listing (Power Ventilator) when furnished with factory supplied motor.

Description - Fan shall be a hooded, low profile, roof mounted, belt driven, propeller supply fan.

Certifications - Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for air performance.

Construction - Fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The motor, bearings and drives shall be mounted on a tubular steel power assembly. The power assembly shall be rigidly secured to the fan housing. The welded steel fan housing shall include a minimum 14 gauge base with integral spun venturi and continuously welded curb cap corners. Fan shall be enclosed with a minimum 18 gauge galvanized steel hood bolted to the fan housing. The hood shall have a removable top cap to allow unobstructed access to the motor and power assembly. Fan inlet shall be protected from entry of foreign material by a 1/2 inch x 1/2 inch galvanized steel screen. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Coating - All non-galvanized steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

Propeller - Propeller shall be extruded aluminum airfoil design with cast aluminum hub. The blade pitch shall be factory set and locked using set screws and roll pin. The hub shall be keyed and locked to the shaft utilizing two set screws or a taper lock bushing. Propeller shall be balanced in accordance with AMCA Standard 204-05, Balance Quality and Vibration Levels for Fans.

Motor - Motor shall be Nema design B with class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

Bearings - Bearings shall be designed and individually tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

Belts and Drives - Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150 percent of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

Product - Fan shall be model HES as manufactured by Loren Cook Company of Springfield, Missouri.

HES Dimension Data

Size	A	B	C	L x W	T Sq.	Material Gauge		Max. Motor Frame	Roof Opening Square*	Approx. Ship Wt.-Lbs. less mtr.
						Base	Hood			
24	28-3/4	3	10	59	36	14	18	182T	31-1/2	480
30	30-1/2	3	10	69	42	14	18	184T	37-1/2	560
36	33	3	10	80	48	14	18	215T	43-1/2	780
42	38	3	10	90	54	14	18	215T	49-1/2	1020
48	41-1/2	3	13-1/2	90 x 110	60	14	18	254T	55-1/2	1110
54	44-1/2	3	14-3/4	111 x 109	66	14	18	256T	61-1/2	1235
60	44-1/2	3	14-3/4	121 x 119	72	14	18	256T	67-1/2	1550

All dimensions in inches. *Roof opening size for curbs supplied by Loren Cook Company only.

Hooded Filtered Supply Ventilator Extruded Aluminum Airfoil Propeller Roof Mounted, Belt Drive

Description - Fan shall be a hooded, low profile, filtered, roof mounted, belt driven, filtered, propeller supply fan.

Certifications - Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705). Fan shall bear the AMCA Certified Ratings Seal for air performance.

Construction - Fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The motor, bearings and drives shall be mounted on a tubular steel power assembly. The power assembly shall be rigidly secured to the fan housing. The welded steel fan housing shall include a minimum 14 gauge base with integral spun venturi and continuously welded curb cap corners. Fan shall be enclosed with a minimum 18 gauge galvanized steel hood bolted to the fan housing. The hood shall have a removable top cap to allow unobstructed access to the motor and power assembly. Filters shall be washable expanded aluminum media with two inch formed aluminum frame. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Coating - All non-galvanized steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

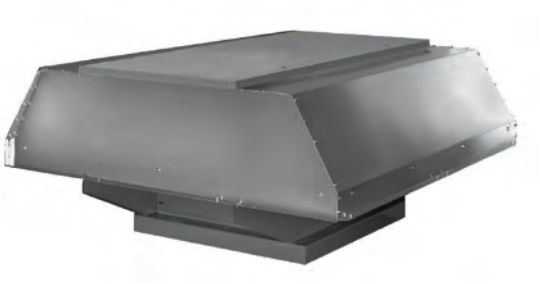
Propeller - Propeller shall be extruded aluminum airfoil design with cast aluminum hub. The blade pitch shall be factory set and locked using set screws and roll pin. The hub shall be keyed and locked to the shaft utilizing two set screws or a taper lock bushing. Propeller shall be balanced in accordance with AMCA Standard 204-05, Balance Quality and Vibration Levels for Fans.

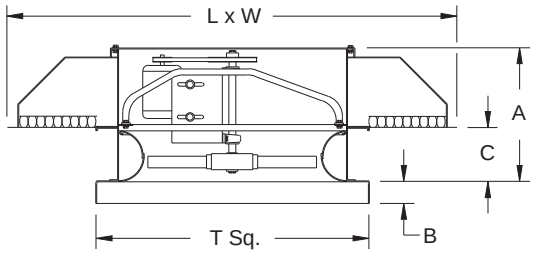
Motor - Motor shall be Nema design B with class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

Bearings - Bearings shall be designed and individually tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

Belts and Drives - Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150 percent of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

Product - Fan shall be model HEF as manufactured by Loren Cook Company of Springfield, Missouri.





Loren Cook Company certifies that the HEF shown herein are licensed to bear the AMCA Seal. The ratings shown are based on tests and procedures performed in accordance with AMCA Publication 211 and comply with the requirements of the AMCA Certified Ratings Program.

Type HEF are furnished standard with UL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

Type HEF are furnished standard with $_{C}$UL 705 listing (Power Ventilator) when furnished with factory supplied motor.

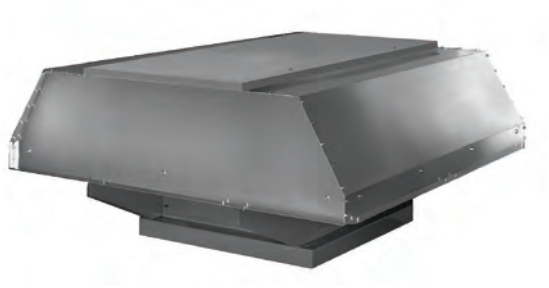
HEF Dimension Data

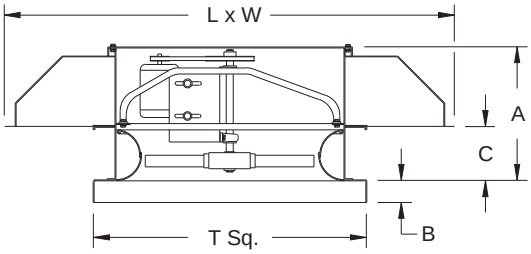
Size	A	B	C	L x W	T Sq.	Material Gauge		Max. Motor Frame	Roof Opening Square*	Approx. Ship Wt.-Lbs. less mtr.
						Base	Hood			
24	30-1/2	3	10	69	36	14	18	182T	31-1/2	525
30	33	3	10	80	42	14	18	184T	37-1/2	610
36	38	3	10	90	48	14	18	215T	43-1/2	840
42	41-1/2	3	13-1/2	90 x 110	54	14	18	215T	49-1/2	1100
48	44-1/2	3	14-3/4	111 x 109	60	14	18	254T	55-1/2	1200
54	44-1/2	3	14-3/4	121 x 119	66	14	18	256T	61-1/2	1345
60	44-1/2	3	14-3/4	119 x 146	72	14	18	256T	67-1/2	1700

All dimensions in inches. *Roof opening size for curbs supplied by Loren Cook Company only.

HER Specifications and Dimension Data

Hooded Supply/ Exhaust Ventilator Reversible Extruded Aluminum Airfoil Propeller Roof Mounted, Belt Drive





Type HER are furnished standard with UL 705 listing (Power Ventilator/ZACT) when furnished with factory supplied motor.

Type HER are furnished standard with $_{C}$UL 705 listing (Power Ventilator) when furnished with factory supplied motor.

Description - Fan shall be a hooded, low profile, roof mounted, belt driven, propeller supply/exhaust fan.

Certifications - Fan shall be manufactured at an ISO 9001 certified facility. Fan shall be listed by Underwriters Laboratories (UL 705) and UL listed for Canada (cUL 705).

Construction - Fan shall be of bolted and welded construction utilizing corrosion resistant fasteners. The motor, bearings and drives shall be mounted on a tubular steel power assembly. The power assembly shall be rigidly secured to the fan housing. The welded steel fan housing shall include a minimum 14 gauge base with integral spun venturi and continuously welded curb cap corners. Fan shall be enclosed with a minimum 18 gauge galvanized steel hood bolted to the fan housing. The hood shall have a removable top cap to allow unobstructed access to the motor and power assembly. The hood shall be protected from entry of foreign material by a 1/2 inch x 1/2 inch galvanized steel screen. Unit shall bear an engraved aluminum nameplate and shall be shipped in ISTA Certified Transit Tested Packaging.

Coating - All non-galvanized steel fan components shall be Lorenized® with an electrostatically applied, baked polyester powder coating. Each component shall be subject to a five stage environmentally friendly wash system, followed by a minimum 2 mil thick baked powder finish. Paint must exceed 1,000 hour salt spray under ASTM B117 test method.

Propeller - Propeller shall be reversible extruded aluminum airfoil design with cast aluminum hub. The blade pitch shall be factory set and locked using set screws and roll pin. The hub shall be keyed and locked to the shaft utilizing two set screws or a taper lock bushing. Propeller shall be balanced in accordance with AMCA Standard 204-05, Balance Quality and Vibration Levels for Fans.

Motor - Motor shall be Nema design B with class B insulation rated for continuous duty and furnished at the specified voltage, phase and enclosure.

Bearings - Bearings shall be designed and individually tested specifically for use in air handling applications. Construction shall be heavy duty regreasable ball type in a cast iron housing selected for a minimum L50 life in excess of 200,000 hours at maximum cataloged operating speed.

Belts and Drives - Belts shall be oil and heat resistant, non-static type. Drives shall be precision machined cast iron type, keyed and securely attached to the wheel and motor shafts. Drives shall be sized for 150 percent of the installed motor horsepower. The variable pitch motor drive must be factory set to the specified fan RPM.

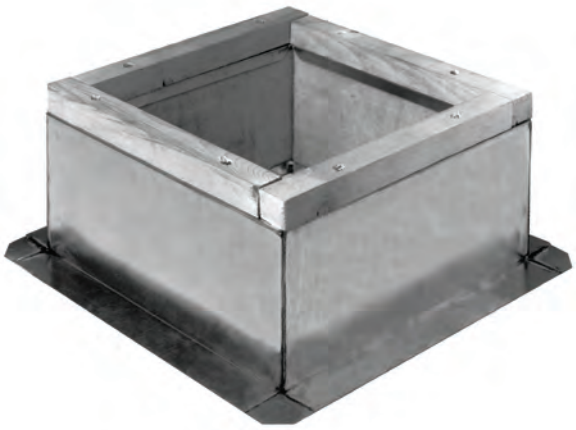
Product - Fan shall be model HER as manufactured by Loren Cook Company of Springfield, Missouri.

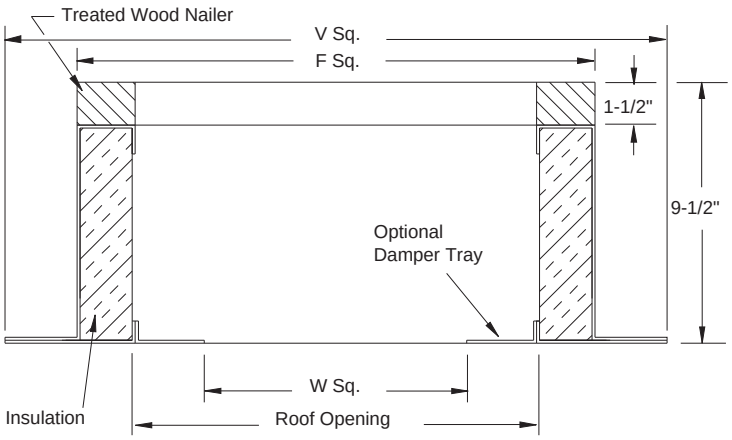
HER Dimension Data

Size	A	B	C	L x W	T Sq.	Material Gauge		Max. Motor Frame	Roof Opening Square*	Approx. Ship Wt.-Lbs. less mtr.
						Base	Hood			
24	28-3/4	3	10	59	36	14	18	182T	31-1/2	480
30	30-1/2	3	10	69	42	14	18	184T	37-1/2	560
36	33	3	10	80	48	14	18	215T	43-1/2	780
42	38	3	10	90	54	14	18	215T	49-1/2	1020
48	41-1/2	3	13-1/2	90 x 110	60	14	18	254T	55-1/2	1110
54	44-1/2	3	14-3/4	111 x 109	66	14	18	256T	61-1/2	1235
60	44-1/2	3	14-3/4	121 x 119	72	14	18	256T	67-1/2	1550

All dimensions in inches. *Roof opening size for curbs supplied by Loren Cook Company only.

Roof Curb





Standard Construction Features

- 18 gauge galvanized steel (RCG) or .080 aluminum (RCA).
- 1-1/2", 3 lbs. density thermal and acoustical insulation.
- Continuously welded corners.
- Wood nailer.

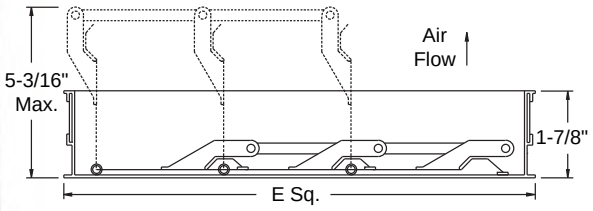
Options

- Damper tray.
- No wood nailer (deduct 1-1/2" for actual height).
- 13-1/2" tall construction.

H Series Size	Curb Catalog Number		F Sq.	V Sq.	W Sq.	Roof Opening	Approx. Ship Wt. Lbs.	
	Galvanized	Aluminum					RCG	RCA
20	RCG-30	RCA-30	30-1/2	34-1/2	23-3/4	27-1/2	37	24
24	RCG-34	RCA-34	34-1/2	38-1/2	27-3/4	31-1/2	41	27
30	RCG-40	RCA-40	40-1/2	44-1/2	33-3/4	37-1/2	49	31
36	RCG-46	RCA-46	46-1/2	50-1/2	39-3/4	43-1/2	84	63
42	RCG-52	RCA-52	52-1/2	56-1/2	45-3/4	49-1/2	94	71
48	RCG-58	RCA-58	58-1/2	62-1/2	51-3/4	55-1/2	104	79
54	RCG-64	RCA-64	64-1/2	68-1/2	57-3/4	61-1/2	115	86
60	RCG-70	RCA-70	70-1/2	74-1/2	63-3/4	67-1/2	125	94

All dimensions in inches. When motor operated damper is used, a wood nailer is required. Sound curbs available. Contact factory for dimensions.

Gravity Backdraft Damper (Exhaust Models)

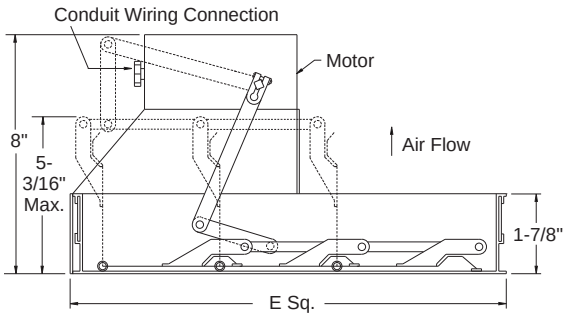


H Series Size	Catalog Number	E Sq.	Approx. Ship Wt. Lbs.
20	BD-26	25-3/4	5
24	BD-30	29-3/4	6
30	BD-36	35-3/4	9
36	BD-42	41-3/4	12
42	BD-48	47-3/4	15
48	BD-54	53-3/4	19
54	BD-60	59-3/4	23
60	BD-66	65-3/4	32

All dimensions in inches. Maximum operating temperature is 200° F (95° C). BD-36 to BD-60 are shipped as two panels. BD-66 is shipped as three panels.

Accessories

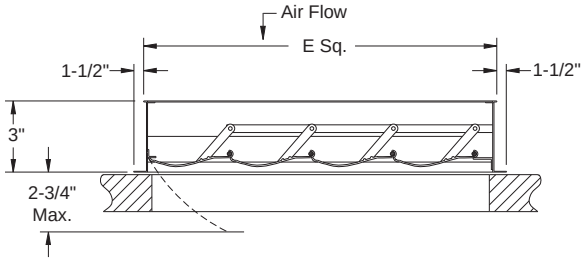
Motorized Backdraft Damper (Exhaust Models)



H Series Size	Catalog Number	E Sq.	Approx. Ship Wt. Lbs.
20	BDM-26	25-3/4	7
24	BDM-30	29-3/4	8
30	BDM-36	35-3/4	13
36	BDM-42	41-3/4	16
42	BDM-48	47-3/4	19
48	BDM-54	53-3/4	23
54	BDM-60	59-3/4	27
60	BDM-66	65-3/4	38

All dimensions in inches. Maximum operating temperature is 130°F (50°C). BDM-36 to BDM-60 are shipped as two panels and use two motors. BDM-66 is shipped as three panels and uses three motors.

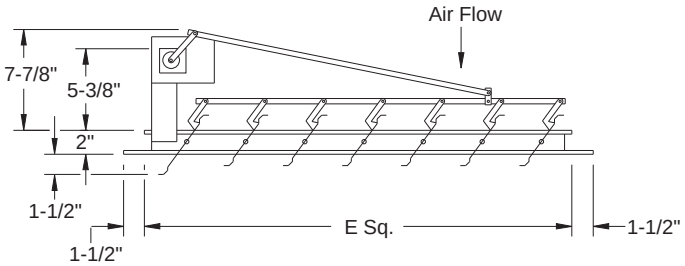
Intake Center Pivot Backdraft Damper (Supply Models)



H Series Size	Catalog Number	E Sq.	Approx. Ship Wt. Lbs.
20	BDIC-26	22-3/4	22
24	BDIC-30	26-3/4	24
30	BDIC-36	32-3/4	32
36	BDIC-42	38-3/4	49
42	BDIC-48	44-3/4	58
48	BDIC-54	50-3/4	70
54	BDIC-60	56-3/4	79
60	BDIC-66	62-3/4	88

All dimensions in inches. Maximum operating temperature is 200°F (95°C).

Motorized Intake Center Pivot Backdraft Damper (Supply and Reversible Models)



H Series Size	Catalog Number	E Sq.	Approx. Ship Wt. Lbs.
20	BDMIC-26	22-3/4	25
24	BDMIC-30	26-3/4	27
30	BDMIC-36	32-3/4	37
36	BDMIC-42	38-3/4	56
42	BDMIC-48	44-3/4	64
48	BDMIC-54	50-3/4	72
54	BDMIC-60	56-3/4	104
60	BDMIC-66	62-3/4	112

All dimensions in inches. Maximum operating temperature is 130°F (50°C). BDMIC-42 to BDMIC-60 use two motors. BDMIC-66 uses three motors.

Additional Accessories

Aluminum hood
Outboard lifting lugs

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